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LOYOLA UNIVERSITY CHICAGO

YO HABLO INGLÉS:

THE INFLUENCE OF MOTIVATION AND GROUP COHESION ON LEARNING ENGLISH IN A
WORKPLACE SETTING

A DISSERTATION SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

PROGRAM IN APPLIED SOCIAL PSYCHOLOGY

BY

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CHICAGO, ILLINOIS

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ABSTRACT

Immigration reform is a current and controversial issue in the United States and around the globe. Although it is unlikely that comprehensive immigration reform is immediately forthcoming in the United States, plans proposed by both liberal and conservative law-makers require those applying for long-term residency to hold employment and demonstrate a working knowledge of the English language. Given that these goals are often difficult to achieve in tandem, enacted immigration reform may suggest that businesses offer English language courses on the job in order to facilitate the legalization process. Answering important questions regarding the process of successful language acquisition, particularly among an immigrant population, will enable instructors to provide greater assistance to their students. The current study examines the influence of age of arrival, motivational orientations and social factors including group cohesion on language use and proficiency as well as on workplace behavior in a sample of immigrants to the United States. There was some support for our primary hypotheses, in that motivational intensity and group cohesion do appear to impact language learning outcomes. However, this impact does not appear to be generated by increased course attendance, which does not show consistent significant relationships with our predictor variables, nor our outcome variables. Additionally, specific motivational orientations do not show significant relationships with attendance or learning outcomes. Limitations of the study and implications for workplace language learning are discussed.

CHAPTER ONE:

INTRODUCTION

“Striving for a comfortable place in two cultures seems to be the best motivational basis for becoming bilingual.” (Gardner & Lambert, 1972, p. 130)

Consuelo moved to the United States from Mexico when she was 23 years old, in search of employment. Shortly after moving, she found work in the restaurant industry. Her transition to working in the United States was relatively easy. All of her supervisors spoke Spanish, making communication easy with them. They understood that she was a gifted manager of people, but her extremely limited English prevented her from moving out of the kitchen area and into direct contact with customers. When she tried to communicate with customers, she found that she was unable to do so clearly. She could not resolve customer complaints nor could she answer telephone calls. As a result, she was unable to advance in her career. She began taking evening English classes at a church near her house, but soon needed to take on a second job when her husband was laid off. This severely limited her opportunities to improve her knowledge of English and her frequency of speaking it.

Consuelo’s story is not unique; rather, it is representative of thousands of stories of immigrants to the United States. Immigrants leave their home countries for myriad reasons, including proximity to family or friends, improved employment opportunities, or flight from religious, political or familial persecution; however, the underlying motivation is generally the

same. Immigrants have a desire for a better life situation and believe that the place they are going is better than the place they are leaving.

In 2009, there were an estimated 12.5 million legal permanent residents (LPRs) in the United States, the majority of whom (7.9 million) were eligible for naturalization (Hoefer, Rytina, & Baker, 2010). In addition to those in the United States legally, estimates suggest that there are at least an equal number of undocumented immigrants currently living in the United States (Passel, 2006). According to some of the most recent estimates available, roughly two-thirds of the undocumented population has been living in the United States for less than ten years, and 40% have been in the country for less than 5 years (Passel, 2006). Although illegal border crossings are often the most publicized and vivid examples of how immigrants attain undocumented status (e.g., "Mexican," 2011), many immigrants come to the United States with a valid visa, overstay its expiration or otherwise violates its terms, and, thus, also receive this classification. An estimated 10% of undocumented immigrants have attained a quasi-legal status by applying for long-term residency or political asylum (Passel, 2006), but the other 90% remain undocumented, lacking any legal status in the United States.

Legalization of Immigrants

The issue of immigration, particularly undocumented immigration, has caused controversy and division. Many opponents of immigration reform, as well as some supporters, consider undocumented immigration as an issue of border security primarily (e.g., Federation for American Immigration Reform (FAIR), 2011; The Heritage Foundation, 2011). These groups suggest that allowing undocumented immigrants to live in the United States is a threat to national security, as well as an economic risk (e.g., Buchanan, 2006; Malkin, 2002). On the other

side of the debate, arguments have been made for the economic, social, and cultural benefits of immigration, both legal and illegal (e.g., Lehman, 1995).

Although border security is important, undocumented immigration must also be addressed within the borders, as classifying and processing undocumented immigrants already living in the United States is more pressing and no doubt of equal importance. Similar to the issue of border security, there are conflicting views regarding how the United States government should attempt to reduce the number of immigrants without papers currently in the United States. On the poles of this spectrum are deportation in every situation and amnesty without exception. Deportation ostensibly reduces the undocumented immigrant population by removing immigrants who do not have legal claim to be in the United States. The reality of the matter is that, until very recently, the United States has lacked the resources and the desire to engage in a war against undocumented immigration by deporting all undocumented immigrants. In 2010, nearly 400,000 undocumented immigrants were deported (Slevin, 2010); this represents the first year that the number of immigrants deported exceeded the number who are estimated to have entered (Hoefer, et al., 2010). On the other end of the spectrum, amnesty would allow undocumented immigrants to become legalized residents of the United States without restriction, qualification, or requirement. This would indeed reduce the number of undocumented immigrants, but the success would only be at a surface level. Even though currently undocumented immigrants would suddenly become documented, this would do nothing to provide an accurate count of the United States population, protect the borders, or prevent future undocumented immigration.

Earned legalization provides a path to residency somewhere in between these two poles. It does not wipe the slate clean completely; rather, it necessitates that undocumented

immigrants earn their residency by meeting specific qualifications (e.g., length of time in the United States), and complying with certain requirements (e.g., employment, proficiency in English) in order to become legal residents. Plans for immigration reform have recently been discussed in the United States Congress (e.g., HR 6497, Development, Relief and Education for Alien Minors (DREAM) Act, United States House of Representatives, 2010) and have come under heavy political attack (e.g., Powell, 2011). Although these plans do not satisfy the beliefs of all American citizens regarding comprehensive immigration reform (e.g., Archibold & Thee-Brenan, 2010), they provide a more realistic path than deportation or amnesty for truly reducing the number of undocumented immigrants in the United States (Rosenblum, Capps, & Lin, 2011).

Benefits of legalization policies

The case for legalization as a viable option for comprehensive immigration reform is made primarily through the benefits that it would bring. These benefits are not limited to currently undocumented immigrants, but include potential economic and social benefits for citizens of the United States. While it is a generally held belief that immigration lessens the economic strength of a country (e.g., Buchanan, 2006), the data do not bear out this belief (Farmworker Justice, 2010; Rosenblum, 2010). If currently undocumented immigrants could pursue legalization, this could potentially lead to wage increases for both immigrants and native workers. In the current situation, employers are able to pay undocumented workers a lesser wage than documented immigrants and native employees, as the former workers have no forum for negotiation. Moving undocumented workers from the informal economy to the formal economy would eliminate the unfair advantage currently held by those who employ undocumented workers, as well as allow these workers to seek a more competitive wage (Rosenblum, 2010). To present a complete discussion, it is essential to understand that

legalization could also have economic risks for all workers. The possibility exists that having to pay a higher wage could lead employers to decrease the size of their workforce. Therefore, it is possible that legalization could mean lay-offs. That said, if employers were forced to reduce the size of their workforce, the decision to retain or downsize workers would be based on the quality of their work, rather than on their wage. In this situation, workers would have to elevate their performance to maintain their employment. This would likely increase the quality of work-product, and, presumably, produce a strengthened economy.

Additional financial benefits could be realized through the re-appropriation of funds currently used for run-of-the-mill immigration status enforcement. The United States government currently budgets nearly \$6 billion on Immigration and Customs Enforcement (ICE; US Department of Homeland Security, 2011). Not only is current border protection expensive, but it has been shown to be relatively ineffective in reducing undocumented immigration. Since patrol efforts at the U.S.-Mexico border were increased in the 1980s, the number of undocumented immigrants has not diminished and the amount of money spent per arrest has risen 467 percent, from \$300 in 1992 to \$1,700 in 2002 (Massey, 2005).

Beyond its economic benefits, legalization of undocumented immigrants would likely provide social benefits for communities which they inhabit (Rosenblum, 2010). Undocumented immigrants often have a strained relationship with law enforcement due to their status. They are less likely to report criminal behavior, due to belief that involvement in any way with the legal system will reveal their immigration status, leading to detainment or deportation. Legalized immigrants do not share the same fear as their status is secure. Reporting crimes does not carry the possible risk of being forcibly removed from the country. Additionally, currently undocumented workers live with the fear that they may lose their jobs or have to move to a

new location (i.e., a new city or state) to avoid immigration enforcement. Legalization again serves to remove this fear. Legalized immigrants, knowing that their status is secure, may be more likely to set down roots and invest in communities by buying property and paying property taxes. Legalized immigrants may also invest in primary education for their children and language and job-related education for themselves. The security that comes with legalization may allow for significant growth in the immigrant community.

Though the potential benefits of comprehensive immigration reform through legalization programs are promising, questions remain about how to enact legalization policy in such a way that undocumented immigrants can fairly enter a path toward long-term residency without reducing the integrity or rigor of the immigration system or encouraging future illegal immigration. Though the specifics of each are debated, any successful immigration reform must outline pre-existing qualifications and subsequent requirements that an undocumented immigrant must meet in order to earn legal immigration status in the United States (Rosenblum, 2010).

Retrospective Qualifications for Legalization

Qualifications for legalization are pre-existing conditions undocumented immigrants must meet; these qualifications determine immigrants' eligibility for legalization through a retrospective examination of an immigrant's history in the United States, including when he or she entered the United States, what has been his or her employment record in the United States, and under what humanitarian conditions he or she moved to the United States. To meet the qualification of migration history, undocumented immigrants must have entered the United States before a given year. In 1986, the United States enacted the Immigration Reform and Control Act (IRCA), which stipulated that undocumented immigrants had to have provided

evidence that they had lived in the United States before the year 1982, in order to qualify for legalization (Kerwin, 2010).

To meet the employment record qualification, undocumented immigrants need to provide evidence specifying the type of work they have previously held. In previous legalization programs, individuals holding jobs in specific fields (often agricultural) had been targeted for legalization (e.g., AgJobs, 2010). Therefore, evidence of work in one of these areas makes one more *qualified* than those who have not held these jobs.

Legalized residency can also be granted to undocumented immigrants for humanitarian reasons. The scope of this qualification is often quite broad; for example, residency might be offered to individuals ineligible for political asylum due to the status of their emigrant nation, but for whom repatriation would be a dangerous and potentially life-threatening experience (Rosenblum, 2010). Additionally, undocumented immigrants with longer-standing ties to a community or with established family units are often considered more qualified for legalization. Although the DREAM Act ultimately did not pass the United States Senate in December 2010, it would have allowed undocumented immigrants who entered the United States as children and completed high school (or its equivalent) to become legalized long-term residents. This legislation speaks specifically to legalization for humanitarian reasons.

Prospective Requirements for Legalization

As policymakers determine retrospective qualifications that an undocumented immigrant must possess for legalization, it is likewise important to look *prospectively* to the requirements that undocumented immigrants must meet in order to become legalized. Among the most recently discussed requirements that undocumented immigrants must meet in order to qualify for legalization are admitting they broke the law, paying back taxes and fines, learning

English, undergoing background checks (Silverleib, 2011), and holding current employment (Kerwin, 2010). Although it may not seem important for immigrants to admit that they broke the law, this step may be helpful in at least two ways. Primarily, if undocumented immigrants acknowledge that they have broken the law, they may more easily accept responsibility for their actions and be motivated to become compliant. Secondly, if undocumented immigrants acknowledge that they have broken the law, U.S. citizens may be more accepting of the immigrants' situations and, therefore, be more willing to favor a path to legalization.

Finally, paying back taxes and fines may serve to generate revenue, which could be used to fund administrative tasks and educational programs associated with legalization (Rosenblum, 2010). Further, requiring undocumented immigrants to hold employment and speak English ought to increase the chances that they will become successfully integrated into the society, as it will prepare them for self-sustenance and interaction with their communities.

Balancing Strictness and Leniency in Immigration Reform Policy

When writing immigration policy, the goal in determining the retrospective qualifications and prospective requirements for legalization should be to maximize the number of undocumented immigrants who are willing and able to comply, without encouraging further undocumented immigration. A policy using more lenient qualifications and requirements will allow a greater proportion of undocumented immigrants to meet the necessary terms, thus potentially leading to a greater reduction in the undocumented population. Unfortunately, these policies with less restrictive qualifications and requirements also allow for more manipulation and abuse of the system (Rosenblum, 2010). Additionally, critics of immigration reform could write them off as amnesty (e.g., Carafano, 2009). If a policy with more restrictive qualifications and requirements were enacted, legalization would be more difficult to attain and

could be seen as earned. This is appealing to many as a fairer way for undocumented immigrants to become legalized long-term residents (e.g., Pew Research Center, 2011) and is considered at least somewhat politically acceptable to support (e.g., Llorente, 2011). However, if the qualifications and requirements are too difficult to meet, undocumented immigrants could be driven further underground, fearing deportation (Rosenblum, 2010). Balancing lenience and restriction is the struggle that lies ahead for writers of immigration policy.

One element that must play a role in this balance is ease of enforcement. Because they have yet to be fulfilled, requirements are easier to monitor and enforce than qualifications. In most cases, the qualification of tenure of residence in the United States cannot be proven, as undocumented immigrants by definition do not have documents showing their immigration history, but the requirements of paying fines and back taxes can be tracked. Current job status and proficiency in English can likewise be monitored and verified. Unfortunately, when writers create new immigration policy, it is impossible to know the lengths to which immigrants will go to comply with the requirements of earned legalization programs, including their willingness and ability to pay fines and back taxes, obtain or maintain employment, and become proficient in the English language. The effort to achieve legal status expended by undocumented immigrants will likely be determined by the benefits that legalization will provide (Rosenblum, 2010).

Formal Language Training in the Workplace

Although the debate regarding the specific qualifications and requirements to be included in comprehensive immigration reform policy is broader and deeper than that being discussed here, there are two requirements that are particularly relevant and actionable, given the fact that they are agreed upon, even by groups generally at odds on the specifics of immigration reform (e.g., FAIR, 2011; Christians for Comprehensive Immigration Reform (CCIR),

2012). These points of central importance are that undocumented immigrants must possess—or be in the process of obtaining—a working knowledge of the English language, as well as hold a job or be part of a family in which the head of the household maintains a job. Currently, the requirement to speak English would exclude between one-third and one-half of otherwise eligible undocumented immigrants (Rosenblum, Capps, & Lin, 2011). This underscores the importance of providing language education to immigrants, both documented and undocumented, in order for them to progress on the path toward long-term residency.

Unfortunately, the goals of proficiency in English and employment cannot often be accomplished simultaneously. Most undocumented immigrants have come to the United States for employment; depending on the type of employment and their employers, immigrants may not have the opportunity or necessity to speak English on a regular basis in the workplace (Hakimzadeh & Cohn, 2007). Additionally, because many immigrants need to work more than one job to fully support their dependents (Reynolds Lewis, 2004), there is not ample time to study English in a typical scholarly setting outside of the workplace. In some fields, immigrants are required to speak English at work; although this situation is generally immersive and provides unique benefits, it does not provide immigrants with the opportunity to learn correct English grammar, syntax and pronunciation, and does not expose immigrants to reading or writing English. These are the advantages of formal learning in a classroom setting.

Due to the difficulty for undocumented immigrants to access formal language learning opportunities outside of the workplace, proposed solutions to this challenge ought to bring formalized language training to the workplace. This training would educate those who wish to improve their English, potentially improving their likelihood of legal residence and citizenship in the United States. The tasks for program designers and curriculum writers will become finding

the best ways to teach English in the workplace and determining which variables are most likely to impact success. We can begin to understand these relationships and outcomes through an examination of past research of second language acquisition. This research provides guidelines and benchmarks for potentially impactful drivers of language success. Although still valuable as a starting point, most of this research has been conducted in academic settings, thus providing no guarantee that the results will generalize to an applied setting among a population of immigrant learners. That said, in order to understand what drivers have the most impact, it is necessary to review literature on language learning in general. Through this review and through the present study, it is hoped that future workplace language curricula can be informed and the placement of instructional emphasis can be determined.

Fundamentals of Language Learning

The discussion of creating workplace curricula for immigrant learners must first include an examination of how a second language is learned, as well as the variables that systematically impact the learning of a second language. Because of its intercultural learning component, learning a second language is fundamentally different from learning other content. Other information is taught within the bounds of one's own culture, while learning a foreign language includes learning and acquiring symbolic elements of different ethnolinguistic communities (Gardner & Lambert, 1959). For this reason, the influences on learning a second language are not only cognitive, but also heavily reliant on motivational and social factors. These three factors frame the discussion of second language learning.

Cognitive Influences

Speaking generally, cognitive influences determine an individual's ability to learn and use information. These influences, as they pertain specifically to language learning, are those

which determine how ready or prepared a learner is to begin the acquisition of a foreign language. Cognitive readiness—considered to be comprised of age of acquisition (e.g., Harley, 1986; Krashen, Long & Sarcella, 1979, Singleton, 1989) and language aptitude (e.g., Carroll, 1958; Carroll, 1981; Gardner & Lambert, 1959; Wittenborn & Larsen, 1944)—determines an individual's cognitive ability to learn a foreign language.

The influence of age

Age at the time of second language acquisition is considered to be one of the most important factors in how well a learner will acquire a second language. Recent language research has debated the strength of the influence of age, and whether or not there is a point at which it is no longer possible for individuals to learn a foreign language.

Although conventional wisdom has suggested that language acquisition at a younger age is better, research in the field has not always provided support for this belief. In reviewing the literature on the topic, Olsen and Samuels (1973) and Krashen and his colleagues (1979) found that adults pass through the early stages of language development (e.g., syntax and morphology) more quickly than children, that older children pass through these stages more quickly than younger children, but that younger children, who experience language exposure at an earlier age, have better long-term learning outcomes and achieve higher second-language learning proficiency than those who begin as adults. These findings thus support the lay belief that younger is better with respect to *long-term* learning, but do not support this belief with respect to *short-term* learning.

Other studies more specifically examined the effect of age of onset within studies in formal instructional settings. Snow and Hoefnagel-Hohle (1978) found that Dutch adolescents (12-15 years old) were able to acquire language in an instructional setting more quickly than

younger children (8-10 years old); adolescents also showed greater language advances than younger children in the short-term. However, as the amount of time spent in an instructional setting increased, younger children were able to catch up, and differences among these groups were not statistically significant. The results of a study by Muñoz (2006) replicated Snow and Hoefnagel-Hohle (1978) in part. Muñoz studied learners of English in Barcelona, Spain; the learners began their language coursework at the ages of 8, 11, and 14. Muñoz found that on measures of speech perception, listening comprehension and oral fluency, there were no statistically significant differences between younger and older students. However, he also found that older children performed better than younger children initially on syntactical measures, and that younger children did not catch up over the course of the study. Cochrane (1980) found that adults outperformed children (ages 3-12) when taught in a formal instructional setting, even on issues of pronunciation, on which children were shown to outperform adults in an informal instructional setting. These studies seem to suggest that younger is not always better when it comes to learning language through formal instruction. Adults can learn and learn well in this setting, generally outperforming children. Although it is possible that the finding may speak more to the difficulty that some children have with formal instruction than the value for adults, it may underscore the need for instruction in a formal setting for the best adult learning.

Ellis (2008) suggests that the difference between the learning of adults and children can be explained primarily through the nature of their learning, either implicit or explicit (See also DeKeyser, 2000). Older learners have more extensive cognitive development, allowing them to excel at the more explicit features of a language (e.g., grammatical structure and syntactical nuance). This allows older learners to surpass younger learners even in the long-term on explicit

tasks (e.g., traditional grammar tests). However, when it comes to the implicit features of a language (e.g., pronunciation), given that learning these features is a more gradual process, younger learners generally outperform older learners. Therefore, when longitudinal studies are performed in a naturalistic setting, younger learners are often shown to outperform older learners on implicit tasks, as they have had significant time to catch up (Snow & Hoefnagel-Hohle, 1978), whereas on tasks of explicit learning (Muñoz, 2006), adults still outperform children.

The relationship between age and language learning does not deal wholly with chronological age. In fact, age, as it is related to language learning, has been defined in two distinct ways: (1) measurement of a learner's age of arrival (i.e., the age at which a learner first entered the country wherein he or she would be using a foreign language) and (2) the number of years spent in the country. In a study of male immigrants who had entered the United States between the ages of 6 and 20, and had resided there for between 5 and 18 years, Oyama (1976) found a strong effect for age of arrival on language listening tasks and tasks where participants were asked to read aloud. In a study of 24,903 speakers of Chinese and 38,787 speakers of Spanish who had been in the United States for at least ten years, Bialystok and Hakuta (1999) found that there was a clear linear effect of age of arrival on language proficiency, with those arriving at a younger age showing greater proficiency. Patkowski (1980) explored grammatical acquisition among educated immigrants and found evidence that those who had entered the United States before the age of 15 were rated as more syntactically proficient than those who had arrived after age 15. Additionally, there was far greater variance on the scores of those who had arrived as older adolescents or adults, with the majority at the midpoint of a 5-point rating scale, compared to those who arrived as children, with nearly 90% of those studied rated at 4 or

above on the same scale. Other studies (e.g., Flege, 1999; Johnson & Newport, 1989) have supported the position that a younger age of arrival is better for long-term language learning than an older age of arrival. Singleton (1989) summed up the research on age of second language acquisition succinctly, saying:

Concerning the hypothesis that those who begin learning a second language in childhood in the long run generally achieve higher levels of proficiency than those who begin in later life, one can say that there is some good supportive evidence and that there is no actual counter evidence (p. 137).

Additionally, part of the debate around age is how long an individual has been exposed to a foreign language. While exceptions certainly exist, this has generally been defined as the length of time spent in an immigrant nation. It is a generally held lay belief that as the amount of time in the immigrant nation increases, so does the readiness of an individual to learn the language of that nation, thus positively impacting their success in learning the language.

Research on the topic has not generally supported this hypothesis. Oyama (1976) found almost no effect for the amount of time spent in the country. Additionally, Johnson and Newport (1989), in their study of 46 native Koreans and Chinese, found that the number of years spent in the United States beyond five did not impact the correctness of participants' test scores.

Therefore, although it makes logical sense that the longer an individual spends in an immigrant nation, the more exposure they would have to the language of that nation, the research suggests that this exposure does not impact language learning outcomes.

Part of the debate on the extent to which age of onset impacts language learning has focused on the existence of a critical period for language learning (called the Critical Period Hypothesis, Penfield & Roberts, 1959). The critical period for language learning has been defined as: 1) a point at which foreign language can no longer be learned, suggesting that the

ability to learn languages declines until a point where it is impossible to acquire additional foreign language (Ellis, 2008); and 2) a starting point for a decline in language learning (Birdsong, 2006), suggesting that it is possible to learn a language as a native speaker without accent until the critical period begins. After this point, however, the ability to learn a foreign language declines. Penfield and Roberts (1959) suggested that the optimal period for language learning is during the first ten years of life, while the brain retains its plasticity. Johnson and Newport (1989) concluded that there was a definite drop-off in language learning after age 15. They found that after that age, language learning was essentially random. Through a reanalysis of Johnson and Newport's data, Bialystok and Hakuta (1994) found that a sharp decline was not seen at age 15. Rather, they found that a negative relationship existed between age and language learning after age 20; this showed a more gradual decline in language learning, not evidence for a critical period.

Much of the research focusing on learners who first began foreign language training as adults does not support the Critical Period Hypothesis. Birdsong (1992) administered a grammaticality judgment test to 20 English-speaking adult learners of French as well as to 20 native speakers of French. He found no significant differences in their judgments, thus providing empirical evidence that learners who begin language training as adults can achieve native-like proficiency. Further studies (e.g., Bongaerts, 1999; Ioup, Boustagui, El Tigi & Moselle, 1994) have produced similar results, showing that some adults learning a foreign language cannot be distinguished from native speakers of that language on measures of grammar and pronunciation. Additionally, Singleton (2005), suggested that if a critical period did exist, its endpoints and duration could not be clear cut; in a review of the research on the topic, he showed how a critical period could begin any time from soon after birth through late

adolescence. Further, Long (1990) stated that the critical age for pronunciation was six years, though Scovel (1981) found no evidence to support such an early critical onset, but rather argued for a critical period which begins prior to puberty. Considering the evidence on both sides of the debate of a critical period for language acquisition, the evidence against is stronger than the evidence in support. This evidence suggests that rather than a steep drop-off in the ability to learn a foreign language after a certain age, there is a gradual decline in the ability to learn language as age increases.

Within the discussion of the influence of age of onset on language learning is fossilization, the inability for learners of a foreign language to attain perfect pronunciation or other language norms of a foreign language (e.g., Selinker, 1972; Selinker & Lamendella, 1978). Fossilization can happen at any level of learning. Some learners are never able to move beyond a very basic level of learning in a foreign language; they use broken constructs and lack sufficient vocabulary to truly communicate. Others may acquire native-like grammar and syntax, while pronouncing words in a particularly foreign manner. These differences speak to the fact that individuals could become fossilized in certain aspects of a foreign language (e.g., pronunciation), but remain active learners in another (e.g., grammar) (Han, 2004). Some researchers have argued that it is difficult to provide evidence for fossilization in its most basic form; rather, these researchers argue for a learning state called stabilization (e.g., Long, 2003). Stabilization is a plateau state in language learning, where learners do not show improvement toward a native-like learning state no matter their efforts. The definition of fossilization would suggest that learners at this plateau would no longer be able to improve. Stabilization, however, allows for this plateau state, as part of the learning process; learners could later have a breakthrough in their language learning, allowing them to get closer to a native-like state.

Language aptitude

Language aptitude is an individual's particular ability for language learning. Skehan (1989) defines language aptitude as composed of general abilities of intelligence and working memory, as well as specific abilities related to auditory ability, linguistic ability, and memory ability. Both of these sets of abilities enhance one's ability to learn language. Carroll (1981) attempted to provide a fuller definition of language aptitude by discriminating it from similar, related concepts. Primarily, he showed that language aptitude is distinct from achievement, not only theoretically, but also empirically. He did the latter by demonstrating that there was no relationship between measures of language aptitude and measures of proficiency at the beginning of a language program, but that a relationship did exist at the end of the program. Second, Carroll distinguished aptitude from motivation. Although some researchers (e.g., Pimsleur, 1966) have argued that language aptitude and motivation are inextricably linked, numerous studies by Gardner and Lambert (e.g., 1972) have shown that while there is a relationship between these two constructs, they are clearly separate factors. Third, Carroll claimed that language aptitude must be seen as a stable factor, not a variable that can itself be influenced by other factors. Fourth, Carroll posited that language aptitude is not to be seen as a necessary prerequisite for language learning, but rather that language aptitude serves to enable and enhance language learning. This is to say that although an individual with low language aptitude may have more difficulty in learning languages than an individual with high language aptitude, he or she would still be able to do so. Finally, Carroll argued that language aptitude is distinct from general intelligence (See also Gardner & Lambert, 1972). Other researchers (e.g., Ellis, 2008) have gone on to conclude that intelligence and language aptitude are related, but are indeed distinct dimensions.

The construct of language aptitude is measured primarily using the Modern Language Aptitude Test (MLAT; Carroll & Sapon, 1959) and its variations, which seek to measure a range of abilities surrounding the preparedness for language acquisition. The MLAT covers four main components comprising language aptitude (Carroll, 1965): 1) Phonemic coding ability, the ability to code foreign sounds in a way that they can be remembered later; 2) Grammatical sensitivity, the ability to recognize how words function grammatically in sentences; 3) Inductive language-learning ability, the ability to identify patterns of correspondence and relationships involving form and meaning; and 4) Rote-learning ability, the ability to form and remember associations between stimuli. This final ability is particularly helpful in learning vocabulary. While other instruments measuring language aptitude have been presented to the research community (Grigorenko, Sternberg & Ehrman, 2000; Parry & Child, 1990), these measures have performed at or below the level of the MLAT, thus not convincingly demonstrating that any of them should be used in place of the MLAT.

Numerous research studies have shown a strong relationship between language aptitude and language proficiency and achievement, thus underscoring the importance of language aptitude. In early studies of the MLAT, Carroll (1981) found correlations between .40 and .60 with a variety of criterion measures of language proficiency and achievement (e.g., final course grades, objective foreign language attainment tests, instructors' estimates of learners' language abilities). Subsequent studies have all shown similar results (e.g., Gardner, 1980; Horwitz, 1987; Skehan, 1986a, 1986b, 1990; Ehrman & Oxford, 1995; Harley & Hart, 1997; Grigorenko, et al., 2000; Kiss & Nikolov, 2005). Gardner and MacIntyre (1992) summed up much of the research on language aptitude by saying, "Research makes it clear that in the long run language aptitude is probably the single best predictor of achievement in a second language" (p.

215). Interestingly, language aptitude has been shown to impact language learning in both formal and naturalistic settings. In a study of 61 French high school students, Horwitz (1987) found a correlation between language aptitude (measured by the MLAT) and a written grammar test (a measure of explicit knowledge of a second language) of $r = 0.41$, and between language aptitude and oral tasks requiring relatively spontaneous language (a measure of more implicit knowledge) of $r = 0.40$. Skehan (1986a, 1986b, 1990) and Harley and Hart (1997) also showed similar results, leading researchers to conclude that language aptitude is a predictor of success for both formal and informal tasks of language learning.

As mentioned previously, Carroll (1981) considered language aptitude to be stable (i.e., a variable that could not be swayed by training or instruction). Research on the topic has generally supported this assertion. Sawyer (1992) did not find any correlation between language aptitude and exposure to foreign languages in learners of Southeast Asian languages. Harley and Hart (1997) found no difference in language aptitude among students who had begun language immersion in first grade versus those who had begun in seventh grade. Further, Kiss and Nikolov (2005) found no evidence to suggest that language aptitude improves as a result of language training. Through this work, researchers have shown that language aptitude does seem to be quite stable and should be considered distinct from a skill to be developed (Sawyer & Ranta, 2001).

The Importance of Instruction, Particularly in Adults

One of the determining factors in foreign language acquisition, particularly among adult learners, is instruction received. Before discussing instruction further, it is important to state at the outset that language learning through immersion has incredible value, but that it is generally not enough for full proficiency in a foreign language. Research has shown that students who

receive instruction in addition to immersion, or received instruction which includes immersion (e.g., second language immersion programs in a school setting) tend to outperform those who have only learned a foreign language through immersion in a naturalistic setting (e.g., Ellis, 2008; Genesee, 1987, 2004; Turnbull, Lapkin & Hart, 2001). Bardovi-Harlig (2000) reviewed a number of studies of migrant workers in Europe, finding that those who had received formal instruction had a richer experience of the language, expressing a deeper understanding and use of tense and aspect features than those who had not received formal instruction (also see Dietrich, Klein & Noyau, 1995). Learners who receive instruction may be able to gain a deeper knowledge of a foreign language even after being in a stabilized state of language learning. Without this instruction, these same learners would not likely perform at as high a level linguistically, but rather would maintain the level of language proficiency that they had attained in a naturalistic setting.

Motivational Influences

The influence of motivation has not been overlooked in the study of language learning. In fact, during the past thirty years of research on language learning, the influence of motivation has been a constant topic of study. Research on motivation in language learning began with the study of two orientations by which a learner could be motivated to learn a second language: integrative and instrumental (Gardner & Lambert, 1959; 1972). Integrative orientation to learn a second language signifies a learner's desire to acquire a second language in order to associate with individuals who speak the target language; a learner with an instrumental orientation intends to learn a second language for more practical reasons, in order to become more marketable in the job world, to travel, or to help one's family. Before further describing these orientations in greater detail, it makes sense to make a clear distinction between orientation

and motivation. An orientation to learn a second language is similar to how one may generally define motivation, that is, as a general reason or set of reasons for learning a second language. Motivation, however, refers to the *effort* that one places on learning a second language (Ellis, 2008).

As research in motivation to learn a second language progressed, the paradigm shifted to a cognitive-situated view of motivation (Ellis, 2008). An increased amount of literature focused on situation-specific factors, particularly the classroom learning situation (e.g., Crookes & Schmidt, 1991; Williams & Burden, 1997). At the same time, there was also greater thinking around the process-oriented view of motivation, that is, the dynamic nature of motivation and how it is likely to change over time within an individual (Dornyei, 2001).

An important claim that researchers have made regarding motivation to learn a second language is that motivation is as important a predictor in language learning as linguistic aptitude (Dornyei & Schmidt, 2001; Gardner, 1985). Motivated students exert more effort and show greater persistence in their learning than unmotivated or lesser motivated students. Further, learners with a clear orientation to learn a second language are generally able to persist longer and often show greater achievement than those without a clear motivational path. Short-range motivational props (e.g., fear of failure, desire to do well in school, vague future job requirements) do not have staying power.

The following is a review of the integrative and instrumental orientations and the ideal language self, how these orientations map to intrinsic and extrinsic motivations, as well as how they are hypothesized to impact language learning. Also included here is a discussion of linguistic self-confidence and linguistic anxiety, as these variables are also proposed to impact

language learning. Finally, included here is a description of motivational intensity—the effort a learner expends to learn a foreign language—and its impact on language achievement.

Integrative Orientation

Research on motivation to learn a second language began with the study of integrativeness (Gardner & Lambert, 1959; 1972). Primarily, integrativeness has been defined in two ways, each of which describes a desire an individual may have to interact with a particular cultural group, as well as the central belief that because language is a symbolic representation of culture, learning the language of a culture is a major way to identify with that culture (Gardner & Lambert, 1972, p. 194). The first definition, provided by Gardner and Lambert (e.g., 1972) suggests that integrativeness encompasses a general positive attitude toward another language community (i.e., an interest in foreign languages and the people who speak them). This aspect of the orientation is seen particularly in high school and college-aged students who seek a greater knowledge of foreign people groups and cultures, and who desire to connect with these groups through the use of their languages.

Clement (1988) suggested a definition with greater emphasis on integration with the community of the target language. This definition goes beyond a greater knowledge of a language community, suggesting rather that those with an integrative orientation seek to become acculturated into that foreign linguistic group (Clement, 1988). This definition actually connects back to earlier work by Gardner and Lambert (1959) on dissatisfaction with one's own culture. Adopting an integrative orientation of this sort may include a tendency toward bi-cultural existence or it may signify the leaving behind of a particular cultural identity in favor of adopting a new identity. The more dissatisfied one is with his or her own cultural group, the

more likely that he or she will integrate more fully into the culture of the second language group (Gardner & Lambert, 1959).

Though additional definitions had been proposed for inclusion into the integrative orientation, Masgoret and Gardner (2003) successfully incorporated these definitions into a fuller explication of the construct (see also Dornyei, 2005). Part of this definition included attitudes toward the learning situation (i.e., the instructor and the class itself; e.g., MacIntyre & Gardner, 1991), and the specific inclusion of an integrative motivation (i.e., effort) to learn a second language. These attitudes have been shown to impact perseverance in language learning, and, ultimately, language learning outcomes (Gardner, Lalonde & Moorcroft, 1985). Additionally, the inclusion of motivation was proposed as part of the definition of integrative orientation (Dornyei, 2005; Masgoret & Gardner, 2003). Specifically, this suggests that learners must express the effort and desire to learn a second language to meet the definition of integration. To further clarify this point, Dornyei (2005) referred to work by MacIntyre (2002), who suggested that, “The student who endorses integrative attitudes or, more simply an integrative orientation or goal, but who does not show effort or engagement with the language, is simply not a motivated learner” (p. 48). This is to say that language learners cannot merely express an integrative orientation, but must also put forth the effort to learn a second language in order to have success. The current study uses the definition proposed by Clement (1988), while recognizing that the integrative orientation will impact motivated behaviors, thus also incorporating this aspect of the definition raised above.

Previous research on the integrative orientation has been somewhat equivocal. For example, Au (1988) reviewed 14 studies carried out by Gardner and his associates. In this study, she found that seven studies showed no relationship between the integrative orientation and

language outcomes, and that four studies showed a negative relationship. In 13 studies conducted by other researchers, only a minority produced evidence of a modest positive relationship. Further, Au suggested that some components of the integrative orientation relate to language achievement, while others do not play a role. Gardner (1988) defended his work, saying that it was too simplistic to think that all aspects of the integrative orientation would impact language achievement in the same way or to the same degree. In previous research, Gardner (1980; Lalonde & Gardner, 1985) had shown that a composite index of motivation, rather than a single aspect, is most effective at predicting achievement in one's second language.

In further support of the integrative orientation, Gardner also referenced a string of studies which had demonstrated consistent correlations between integrative orientation and achievement in French among speakers of English in Canada. Gardner and Lambert (1972) showed that integrative orientation was a stronger predictor of second language achievement than instrumental orientation. Later, although Gardner (1985) continued to assert the importance of the integrative orientation, he did acknowledge that learners could possess both an integrative orientation and an instrumental orientation and benefit from both. Parallel research showed that there was definite overlap between the integrative and instrumental orientations. In their study of 337 students of Spanish, Muchnick and Wolfe (1982) found that measures of integrative and instrumental orientation loaded on the same factor; for these students, the two orientations could not be separated from one another. Ely (1986b), in his study of first year students of Spanish, found that integrative and instrumental orientations loaded on separate factors, but also that each could be represented strongly within the same student.

Gardner argued for the differential impact of integrative and instrumental orientations, and in several studies (Gardner, 1980; 1985), he used a general measure of motivation based on the Attitude Motivation Test Battery (AMTB), including variables intended to measure both orientations, though with an emphasis on the integrative orientation. In these studies which stretched across 7 geographical areas in Canada, Gardner found an overall correlation of 0.37 between the AMTB and French grades. These studies suggested that a learner's integrative orientation was able to account for 14% of the variance in achievement scores.

Although the integrative orientation has been shown to be influential in a range of studies, its effects on language outcomes are not direct. Rather, research has shown that the relationship between the integrative orientation and language outcomes is mediated by the orientation's influence on a learner's motivated behaviors. For example, Glicksman, Gardner and Smythe (1982) showed that there was a positive relationship between a student's integrative orientation and the number of questions they received from the instructor, the number of answers they volunteered in a classroom setting, the number of correct answers they provided and the positive reinforcement that they received. Further studies have shown that learners with an integrative orientation use the language more often with greater speaking and reading proficiency (Ehrman, 1996; Noels, 2001; Noels, Clement & Pelletier, 1999; Tachibana, Matsukawa, & Zhong, 1996). They have also been shown to exhibit greater grammatical sensitivity, incorporate better language learning strategies (Ramage, 1990), and demonstrate an increased rate of learning (Gardner, et al., 1985).

Further, integrative orientation is assumed to impact language learning through increased persistence to learning the language (e.g., Clement, Smythe & Gardner, 1978; Gardner, 1983; Ramage, 1990). Clement and his associates (1978) studied high school learners

enrolled in an intensive French language program, investigating the factors associated with students' withdrawal from class. They found that the most impactful determinant of whether or not a student would continue with the class was his or her motivation. Motivation was a more powerful predictor of in-class retention than language aptitude, classroom anxiety or even current achievement in the second language. Ramage (1990) also investigated factors influencing drop-out; his sample included American high school students learning French and Spanish. According to this research, students who continued past the second year attached very low importance to fulfilling curriculum requirements, but reported an interest in target-language cultures, suggesting that they possessed an integrative orientation to learn the target language, as well as a desire to attain proficiency in all language skills. In that same vein, Goldberg and Noels (2006) found that those with an integrative orientation to learn a second language were more likely to pursue post-secondary education in the language, as well as express identification with the second language community.

Studies previous to Au's (1988) analysis of Gardner's work suggested that there was little, and perhaps even a negative relationship, between an integrative orientation and language outcomes. For example, Oller, Baca and Vigil (1977) found that Mexican women who were more negative in their ratings of Caucasians were found to be more successful in learning English than those who provided positive ratings. They explained these findings by suggesting that the learners may be motivated to excel in English because of their negative attitudes toward those who spoke the target language. Dubbing this the "Machiavellian motivation," Oller and Perkins (1978) suggested that these particular students had a desire to manipulate and overcome people of the target language. Further research by Oller and his associates (Chihara & Oller, 1978) found weak and insignificant relationships between an integrative orientation and

achievement. Additionally, Kruidenier and Clement (1986) found no evidence of a relationship between integrative orientation and achievement in a study of language learners in Quebec. However, they did find that a learner's orientation to learn a second language differed based upon the language they wished to acquire. Specifically, they found that learners of Spanish wanted to be able to travel, while learners of English primarily sought friendship. Dornyei (1990) suggested that although these specific orientations were different, it was likely that they were all different manifestations of an integrative orientation.

Further criticizing the importance of the integrative orientation on language outcomes were Noels, Pelletier, Clement and Vallerand (2000), who claimed that the integrative orientation was not fundamental to the process of motivation to learn a second language. In support of their claim, they showed that French-speaking language learners displayed a number of different reasons for learning a second language, with the most important ones not being associated with an integrative orientation.

Most recently, Masgoret and Gardner (2003) performed a meta-analysis of 75 samples of learners, with a total sample size of 10,489. They demonstrated that all three components of integrative motivation mentioned previously (integrative orientation, attitude toward the learning situation, and integrative motivation) were related to objective and self-reported measures of achievement in a second language. Furthermore, this study showed that motivation had the strongest relationship with learning outcomes, providing evidence for Gardner's long-held claim that motivation was more strongly related to achievement than integrative orientation itself or a learner's attitude toward the learning situation. Although this study emphasized the importance of the integrative motivation in language learning, an earlier study by Tremblay and Gardner (1995) suggested that the integrative motivation was not the

sole motivational influence on language outcomes, acknowledging that the field, as well as Gardner had moved from the strict adherence to this motivation.

Instrumental Orientation

Learners with an instrumental orientation to learn a second language are those who desire to learn language for the concrete benefits that it may bring about. These benefits may include ease in obtaining a job or to advance one's career, to work abroad, or to help one's own family. When first introduced by Gardner and Lambert (1959), the instrumental orientation was considered completely separate from the integrative orientation, and individuals who showed high levels in one orientation were not hypothesized to show high levels in the other. Subsequent studies (Ely, 1986b; Gardner, 1985; Muchnick & Wolfe, 1982) have suggested that the integrative and instrumental orientations are more closely related than originally hypothesized, or, at the very least, can both be seen in the same individual.

As far as its impact on language learning outcomes, the instrumental orientation has been found to be a weak predictor of foreign language achievement (Gardner & Lambert, 1972; Masgoret & Gardner, 2003). However, these studies also found that the instrumental orientation may be more powerful in contexts where learners have little or no interest in the target-language culture or have little opportunity to interact with its members. Gardner and Lambert (1972) found that instrumental orientation accounted for a significant proportion of the variance in learners of English in the Philippines. They went so far as to say, "Apparently, when there is a vital need to master a second language, the instrumental approach is very effective, perhaps more so than integrative" (p. 130). Lukmani (1972) found that the instrumental orientation was more important than the integrative orientation in non-Westernized female learners of English in Bombay. These studies speak more broadly to the

fact that the social situation learners are in may determine their orientation for learning a second language.

Instrumental motivation (as opposed to orientation) has also been investigated experimentally (Gardner & MacIntyre, 1991). Students become instrumentally motivated to learn foreign language when they receive direct benefits (e.g., money, course grades) after successfully performing tasks related to foreign language learning. Instrumental motivation, thus, can be manipulated experimentally. Dunkel (1948; cited in Gardner & MacIntyre, 1992) offered financial rewards to students learning Farsi. He found a trend toward better performance for the students who were paid compared to those who were not. Similarly, Gardner and MacIntyre (1991) studied 46 participants, half of whom were offered a ten dollar reward for learning foreign language word pairs, and the other half who were told to do their best. Participants who were offered the reward spent more time viewing the word pairs and performed better. However, once the reward was eliminated, the learners no longer exerted extra effort.

Intrinsic and Extrinsic Motivations

General discussions of motivation distinguish between intrinsic and extrinsic reasons for engaging in particular activities. One is intrinsically motivated to perform an activity when one has inherent interest in it. Noels and her associates (2000) suggested that intrinsic motivation includes three separate, but related, attributes: 1) knowledge, derived from exploring new ideas; 2) accomplishment, the pleasantness from trying to achieve a goal; and 3) stimulation, the enjoyment of actually performing the task. Furthermore, Keller (1983) theorized that interest in a topic or activity, defined as the positive response to stimuli based on existing cognitive structures in such a way that a learner's curiosity is aroused and sustained, is one of the main

elements in motivation. In this study, Keller found that teachers would describe a student as motivated if he or she became productively engaged in learning tasks, and sustained that engagement without the need for continual encouragement or direction.

Interest in a topic can be engendered if learners become self-directed (e.g., Dickinson, 1987; Holec, 1980). In a learning setting, this can include allowing learners to choose their own objectives, to choose how to achieve these objectives, and to evaluate their own progress. Bachman (1964) suggested that involving learners increases their motivation and productivity. In an experimental study, Gardner, Ginsberg and Smythe (1976) compared two instructional programs, a traditional one with a heavy focus on grammatical accuracy and a more innovative one, with individualized instruction and opportunity for free communication. They found that the students in the traditional program were more likely to withdraw and held a more negative view of the instructor, whereas the students in the innovative program showed a greater desire to excel, and held a positive attitude toward learning the target language.

In language learning research, intrinsic motivation has been likened to integrativeness (especially when using Gardner and Lambert's (1959) definition), as individuals with an integrative orientation desire to learn the language for the learning itself, because they find it beautiful or rewarding, or because they want to know the language and its people. As a result of its link to intrinsic motivation, students endorsing an integrative orientation have been shown to be more effective at improving their language learning, due to the actions they take. Because learners are excited and passionate about the language, they spend their free time engaging in activities in which they use the language, thus gaining valuable practice. This speaks to the increased motivational intensity of learners with an integrative orientation.

On the other end of the motivational spectrum is extrinsic motivation (i.e., performing an act where a goal outside of the activity drives the rationale for doing it). Extrinsic motivation has been likened to instrumental orientation in language learning research as language learning is considered to be a means to achieving a specific goal. Those with an instrumental orientation do not primarily set out to learn a foreign language because of its beauty, but rather to obtain a job or enhance employment opportunities, or to help family.

Several aspects of extrinsic motivation have been shown to impact learning. These aspects deal with self-determination and the relation of the language learning to one's own identity (e.g., Deci & Ryan, 1985, 2002; Noels, et al., 2000). The first is external regulation, which suggests that a person performs an activity to gain a reward or avoid punishment. If a learner performs a behavior for this reason, it is unlikely to become part of his or her identity. The second is introjected regulation, which results from pressure individuals have internalized. Under introjected regulation, one performs an activity to avoid guilt or enhance one's ego. The third is identified regulation, stemming from personally relevant reasons. One carries out an activity because it is essential to achieve a goal set out by the individual. This is most closely related to instrumental orientation. Individuals perform activities in order to achieve their goals. With respect to language learning, individuals attend classes or expose themselves to second language situations in order to learn the language, as these actions help them achieve other goals. Finally, there is integrated regulation, where one performs behaviors that fit with one's values and aspirations. This is most similar to intrinsic orientation in that it brings positive emotions, increased engagement and creative productivity. Under integrated regulation, the learning is the end in itself.

In considering both intrinsic and extrinsic motivations, Manolopoulo-Sergi (2004) suggested that learners' motivations may influence how they process language inputs, how they integrate what they intake into their interlanguage systems, and how they process language output. Extrinsically motivated learners are likely to attend only to the surface characteristics of the input, while intrinsically motivated learners will process in a more elaborated way. Furthermore, intrinsic motivation—more so than extrinsic motivation—has been shown to be more highly correlated with measures of achievement. Noels and her associates (2000) suggested that the more self-determined a learner's motivation, the greater his or her achievement. Because intrinsic motivation is considerably more self-determined than extrinsic motivation, intrinsic motivation contributes more strongly to the learning of a second language.

Ideal Language Self

Recently, researchers of second language learning have considered a motivational construct known as the ideal language self and its links to language outcomes (Dornyei, 2005). The ideal language self is a motivation to reduce the discrepancy between one's actual and ideal selves with respect to language learning (Dornyei, 2005). It has been linked to both integrative and instrumental orientations (Dornyei, 2005). If a learner's ideal self involves proficiency in a second language, this indicates an integrative orientation. Instrumentality can be part of a learner's ideal language self when extrinsic motives for learning a language become internalized. For example, long-term instrumental orientation can be incorporated into one's ideal language self, whereas a short-term instrumental motivation to get good grades cannot.

Temporal Nature of Motivation

Recently, research on motivation to learn a second language has investigated the dynamic and temporal nature of motivation, something that Ellis (2008) claimed the work of

Gardner lacked. Specifically, Ellis suggested that Gardner saw motivation solely as a causative factor, leading to achievement in a target language, rather than recognizing the resultative nature of motivation. Further, Ellis suggested that the social-psychological perspective on language learning, for which Gardner advocated, saw motivation as overly deterministic; this school proposed that learners brought their motivation to the table and this motivation drove their learning outcomes (Gardner & Lambert, 1959, 1972). According to Ellis, this did not allow room for motivation to change over time. In order to show that it could, Ellis (2008) drew upon the research of Belmechri and Hummel (1998) who replicated a study of Kruidenier and Clement (1986). Belmechri and Hummel found that some of the same orientations to learn a second language persisted from Kruidenier and Clement (e.g., travel, friendship), but that novel orientations also appeared (e.g., self-understanding). Additionally, researchers have criticized the definition that Gardner and Lambert (1959; 1972) provided for integrative orientation as too narrow and no longer relevant, suggesting that given the global nature of today's world, learners have little interest in learning about the target-language community specifically, but rather that they seek to develop a global identity. This is particularly the case among learners of English, who, in some cases, consider learning English as part of the globalization process (Lamb, 2004).

Speaking to this changeable nature of motivation were Williams and Burden (1997), who outlined three phases of language learning: 1) reasons for doing something; 2) deciding to do something; and 3) sustaining or persisting in that action. Dornyei (2001; 2003; Dornyei & Otto, 1998) built upon this work, suggesting three distinct stages in the process of language learning:

1) *a preactional stage*, in which learners provide reasoning for why they want or need to learn a second language. Dornyei (2003) called the motivational aspect of this stage *choice motivation*, as motivation leads to the selection of a goal. Learners' orientations for studying a second language are considered part of this stage.

2) *an actional stage*, where learners determine how much effort they will invest in the study of a second language. Dornyei (2003) suggested that the orientation selected in the preactional stage must be maintained in the actional stage. He referred to the motivational aspect in this stage as the *executive motivation*, as it pertains to decisions related to how much time learners will spend studying a second language, and to factors related to their classroom experience; these factors could enhance or detract from their learning, depending on the extent to which the learners focus on their goals.

3) *a postactional stage*, where learners evaluate the learning experience. The motivational aspect of this stage is called *retrospection*. In this stage, the way that learners interpret their successes and failures can influence how they perceive their readiness and preparedness to continue in language study, and what activities they will pursue in the future.

In essence, all of the research that has been completed regarding motivational orientation to learn a second language can be subsumed under the preactional stage. As mentioned above, this stage may have received too much attention, so much so that it has been considered by some researchers to be the only meaningful stage (e.g., Gardner & Lambert, 1959, 1972). Although this stage has obvious importance, the motivational impact of the other stages cannot be neglected.

The actional stage has received little attention in the research literature; this is somewhat surprising, as it is during this stage that learners actually engage in the study of

second language, and where their motivation is most likely to change. According to Dornyei's model, it is during this stage that learners generate and carry out subtasks, engage in ongoing appraisal of their progress on each of these tasks, and self-regulate (i.e., make changes to learning strategies, if necessary, to maintain their attention and motivation toward their goals). These processes do not occur in isolation of one another or completely serially. Progress on one subtask may be being evaluated, while another is being generated. According to Dornyei (2001), during this stage, a learner's motivation may be influenced by a number of factors including the overall quality of the learning experience, his or her own sense of autonomy, the influence of parents and teachers, classroom rewards, the influence of the learner group, and the use of self-regulation strategies.

The postactional stage is comprised entirely of evaluation; in this stage, learners examine their past experience with language training. It is also during this stage that learners determine their future course of action as it relates to the study of second language. Dornyei (2005) suggested that the attributions learners make regarding their learning substantially shape how motivated they will be to pursue future action related to language learning. By taking attributions into account in the discussion of motivation to learn a second language, researchers have shown that motivation can result from success, in addition to leading to success (often considered when discussing orientation in the preactional stage and motivational intensity (i.e., effort, described in greater detail below) in the actional stage).

As has been mentioned previously, Gardner (e.g., 1985) saw motivation as causative, though he was open to the possibility that learners' attitudes toward second language learning could change slightly depending on their success or failure. Similarly, Spolsky (1989) suggested that greater motivation and attitudes could lead to better learning, though the converse was not

true. Arguing that motivation was more resultative were Hermann (1980) and Strong (1983; 1984). Hermann's *Resultative Hypothesis* suggested that learners who do well are more likely to develop greater motivational intensity and become more active in the classroom. Strong studied Spanish-speaking kindergarteners and found that fluency in English preceded a desire to associate with the target-language group.

While attribution theory has been part of the social-psychological lexicon for more than 50 years (Heider, 1958), and self-serving bias itself for more than three decades (Miller & Ross, 1975), their inclusion in the study of second language acquisition is still fairly recent and undeveloped. The constructs of attribution and self-serving bias provide a framework for how language learners might interpret their successes and failures. Self-serving bias would suggest that language learners would attribute success in language learning to personally relevant or dispositional reasons like ability, whereas failures would be attributed to more situational causes like lack of effort or barriers in the learning situation. Ushioda (2003), in her study of Irish learners of French, sought to determine what factors allowed learners to maintain a positive self-concept and belief in their capacity to learn language. What she found clearly mapped to self-serving bias, as learners who were successful attributed that success to ability, and those who failed provided situational explanations.

In further support of the dynamic nature of motivation and the influence of attributional explanations on future action was the work of Ellis, Hacker and Loewen (2006). They investigated the influence of language study in primary school on motivation in secondary school. They found that students with two years of language study in primary school reported greater intrinsic interest in learning foreign languages and in the local indigenous language than those who had not had previous training. Similarly, Berwick and Ross (1989), in their study of 90

first-year Japanese-speaking learners of English in Japan, found that students had very little motivation at the beginning of their English course, but demonstrated stronger motivation at the end of the class. Both of these studies suggest that a learner's experience can impact his or her motivation. Additionally, the work on attribution suggests that the relationship between motivation and language learning is cyclical. Motivation can influence a learner's success in a language, which can subsequently enhance motivation. On the other hand, it is possible that low motivation will lead to low achievement, which can lead to lower motivation.

Linguistic Self-Confidence

Part of the debate on motivation to learn a foreign language has focused on the learner's linguistic self-confidence (i.e., the belief that one could learn a second language) (Clement, 1986; Clement & Kruidenier, 1983; 1985; Kruidenier & Clement, 1986). Clement (1986) investigated 293 French-speaking learners of English. The participants were analyzed in two groups, a majority group and a minority group, depending on the predominance of French speakers in the students' region of origin. Participants were measured on a variety of variables including integrativeness, fear of assimilation, motivation (both attitudes regarding learning English and desire to learn English), linguistic self-confidence, frequency of contact with English speakers, and acculturation. English achievement was measured through an oral interview and a standardized proficiency test. Clement found that integrativeness was not related to language outcomes, nor were outcomes influenced by the majority/minority status of the learner. Rather, linguistic self-confidence was shown to be the best predictor of language proficiency. It is possible that the difference between these outcomes and those of the studies of Gardner were based on the sample of learners. Gardner's participants were primarily high school students in a classroom setting, while Clement's participants were generally older, potentially

more mature language learners, and more likely to use English outside of the classroom. That said, Clement, Dornyei and Noels (1994) went on to show the predictive importance of linguistic self-confidence, even among purely classroom learners of English.

Linguistic Anxiety

Language learners in both classroom and naturalistic settings display differing affective responses to the language learning situation. The affective response receiving the most attention in the literature, perhaps because of its impact on motivation to learn a second language, and on language outcomes in general, is anxiety. Although some students are able to control their linguistic anxiety enough to pursue a course of language learning, anecdotal evidence suggests that other students experience so much anxiety regarding the language learning situation that they cannot bring themselves to enroll in a language class or persevere with an already-started language program.

Research on anxiety provides three theoretical definitions for the construct (e.g., Arnold, 1999; Horwitz & Young, 1991): (1) trait anxiety—a permanent disposition to be anxious; (2) state anxiety—anxiety at a particular moment, in response to an isolated situation; and (3) situation-specific anxiety (Spielberger, 1983)—anxiety in response to specific incidents (e.g., public speaking, test-taking). This third type of anxiety is considered to fall between trait and state anxiety, and represents the type of anxiety induced by the language learning situation. Additionally, linguistic anxiety has been classified as a primary emotion (i.e., an automatic, physiological and sub-cortical response), as opposed to a secondary emotion (i.e., one that is consciously evaluative in the cerebral cortex) (Buck, 1984; MacIntyre, 2002).

Data on the impact of anxiety on language learning has been collected using several different methodologies, each allowing for a unique examination of the construct. K. Bailey

(1983) collected diary data in order to identify the sources of anxiety in language learners.

MacIntyre and Gardner (1994) studied linguistic anxiety experimentally. Spielman and

Radnofsky (2001) used ethnographic studies to investigate the sources of linguistic anxiety, and the nature of the relationship between linguistic anxiety and language learning.

Bailey (1983) used rich, qualitative data from diary research to outline several sources of anxiety experienced by language learners. Primarily, he found that many language learners feared the competition of the language classroom. Participants reported that they became anxious when they compared themselves to others and found themselves to be less proficient. More proficient students did not display this anxiety, and as initially less-proficient students became more proficient, their anxiety around the language classroom likewise decreased, as they were better able to compete. Bailey also found that students experienced anxiety regarding language tests. Because this study did not contain quantitative measures of general anxiety or test-specific anxiety, it could not be determined if language tests in particular were a cause of anxiety or if they were merely a byproduct of students' baseline anxiety regarding test-taking. Additionally, Bailey and other subsequent researchers (Ellis, 1989; Ellis & Rathbone, 1987), showed that language learners experienced anxiety over their relationship with their instructors. Participants reported that they found instructors' questions threatening and felt that their inability to provide correct answers would be a source of disappointment, making the students a laughing stock.

Perhaps more generally, research has shown that language learners experience anxiety around communicating spontaneously in the target language. Horwitz, Horwitz and Cope (1986) and Matsumoto (1987) found that most anxiety in language learning comes from listening to and speaking the target language. Woodrow (2006) interviewed 47 advanced language students

in Australia, and found that the most commonly mentioned language stressors were speaking English to native speakers, speaking English in front of classmates, and giving oral presentations in English, all of which deal specifically with the issue of communication in the target language. Woodrow also identified two types of anxious language learners, those with retrieval interference (i.e., those who possess language skills, but could not effectively recall their knowledge when it was needed), and those who are skill-deficient. In their qualitative study of university learners in Chile, Gregersen and Horwitz (2002) found that anxiety was related to the personality trait of perfectionism. Associated with this trait are higher standards, a greater tendency to procrastinate, a tendency to worry about the opinions of others, and a greater concern about making errors. Studies by Ehrman (1996) and Schmidt, Boraie and Kassabgy (1996) suggest that students with an integrative orientation feel less anxiety regarding language learning and even have increased feelings of linguistic self-confidence.

Complicating the issue of anxiety in language learning are individual differences in the causes of anxiety (Horwitz, 2001). What is comfortable for one learner can be stress-inducing for another. These different sources of anxiety have been captured in the different instruments created to measure linguistic anxiety. Gardner (1985) designed three instruments to measure the differing facets of linguistic anxiety: 1) French Class Anxiety; 2) English Use Anxiety; and 3) English Test Anxiety. Based on conversations with self-described anxious learners, Horwitz and his colleagues (1986) designed the Foreign Language Classroom Anxiety Scale, a 33-item measure, focused around three factors: communication apprehension, examinations, and fear of negative evaluation. MacIntyre and Gardner (1991b) developed an extensive set of 23 forms to measure language anxiety. Cheng, Horwitz and Schallert (1999) developed a measure of writing anxiety.

Though the sources of anxiety in language learning are important without question, the impact of anxiety on language learning is yet more important to consider. The literature on this topic has generally fallen in one of four categories: (1) facilitation of language learning; (2) negative causal impact on language learning; (3) no impact on language learning, and (4) a debate as to whether anxiety causes or results from language difficulties.

Researchers across the timeline of language learning research have shown that at least some anxiety can be beneficial for language learning. Chastain (1975) found that anxiety was positively correlated with grades in a group of French learners. Learners with high levels of anxiety performed better than those with low levels. Kleinmann (1978) provided evidence to show that Spanish and Arabic learners of English who reported anxiety were more likely to use complex grammatical structures than those reporting no anxiety. Eysenck (1979) found that low (though not high) levels of anxiety could indirectly lead to better performance on language measures through increased effort, showing a link between anxiety and motivation. Scovel (2001) and MacIntyre (2002) drew on foundational research in social psychology (Yerkes & Dodson, 1908; Zajonc, 1965) as an explanation as to why mild anxiety could facilitate performance. Psychological arousal, caused by the presence of others, can lead learners to better performance on overlearned and well-practiced tasks. In cases where learners possess language skills, mild anxiety can aid in their language performance.

Though some studies have shown the positive effects of anxiety on language learning and performance, in general, anxiety has been shown to have a negative effect on learning. Chastain (1975) found that anxiety was negatively related to grades in Spanish. Horwitz (1986) found sizable negative correlations (in excess of -0.5) between foreign language classroom anxiety and final class grades. Young (1986) found that anxiety was negatively correlated with

oral proficiency in a group of prospective teachers, though the relationship became non-significant when controlling for the teachers' ability. Ely (1986a) showed that students who were less comfortable with their language proficiency were less likely to take risks, highlighting the link between anxiety and linguistic self-confidence. Gardner, Moorcroft and MacIntyre (1987) showed that there was a significant negative relationship between anxiety and scores on a word production task, though they found no relationship between anxiety and free speech quality. MacIntyre and Gardner (1991a, 1991b) found significant negative correlations between anxiety and performance in a learner's second language. In fact, they showed that these correlations were the highest simple correlations of attitudes with achievement. Additionally, Woodrow (2006), in a study of 275 predominantly Asian language learners, found significant negative correlations between linguistic anxiety and oral performance both inside and outside of class.

Though the majority of the research on anxiety in language learning has demonstrated that anxiety has either a positive or negative effect, additional research has shown that, in some cases, anxiety and language outcomes do not have a relationship. For example, Chastain (1975) found evidence of a positive relationship, a negative relationship and no relationship between anxiety and language performance. Parkinson and Howell-Richardson (1990), in their study of 51 diaries of adult learners of English in Scotland, also found no relationship between anxiety and improvement in language learning.

Much like in the discussion of motivation, the status of anxiety as a cause of difficulty in language learning or as a result of this difficulty has been debated. MacIntyre and Gardner (1991a) theorized that the relationship between anxiety and learning is moderated by the learner's stage of development and situation-specific learning experiences. They stated that

learners initially experience little anxiety regarding the language learning situation, so there is little to no effect on language learning. Linguistic anxiety develops, they suggest, when learners have negative outcomes. These outcomes, and the anxiety which accompanies them, have a debilitating effect on language learning. Sparks, Ganschow and Javorsky (2000) agreed with this line of research, proposing the Linguistic Coding Difference Hypothesis, which states that success or failure in a foreign language is determined primarily by language aptitude, and that students' anxiety is a consequence of learning difficulties.

On the other side of this debate are those who provide evidence to suggest that anxiety is potentially causative. Elkhafaifi (2005) found higher levels of listening anxiety in beginner learners than in intermediate and advanced learners. Though Horwitz (2000) suggested that anxiety may be reduced as these learners develop their language skills, he found that even advanced and successful learners have reported anxiety in language learning. Therefore, he suggested that though processing difficulties may cause anxiety in some learners, this explanation is unable to account for all learners. In earlier studies, MacIntyre and Gardner (1991b; 1994) found that anxiety is causally related to language achievement through the effect it has on the learning processes. They hypothesized that anxiety could affect each different stage of the learning process: at input (i.e., the first encounter with the target language), during processing as connections of new and existing knowledge are formed, and at output, when the learning of new knowledge is demonstrated. They further showed the causative impact of anxiety on language learning in an experimental study which induced anxiety (MacIntyre & Gardner, 1994). After introducing a video camera to the experimental situation, participants immediately displayed increased anxiety and decreased performance. However, anxiety declined as participants became accustomed to the camera's presence. Given the plausible

arguments and evidence on both sides of the debate, some researchers have concluded that poor performance in language can be the cause and the effect of linguistic anxiety (Skehan, 1989; Sparks, et al., 2000).

Willingness to Communicate

Linguistic self-confidence and anxiety can affect a language-learner's willingness to communicate (WTC) in the target language (MacIntyre, Clement, Dornyei, & Noels, 1998). WTC is defined as a learner's intention to communicate in the target language, given a choice (MacIntyre, Baker, Clement, & Conrad, 2001); it is generally considered to be a situationally-determined characteristic, and the final step before verbal communication. Dornyei and Kormos (2000), in their study of Hungarian students in a formal language setting, found that the relationship between WTC and language production was moderated by the students' attitudes toward the instructional task. When attitudes toward the task were positive, there was a strong correlation between WTC and the amount of English produced. When attitudes toward the task were negative, the relationship between WTC and amount of English produced was almost non-existent. Kang (2005) studied four adult male Korean learners of English in the United States. When paired with native speakers and asked to engage in free conversation, WTC in English increased under psychological conditions of excitement, responsibility and security. Cao and Philp (2006) also provided evidence for the situational determination of WTC. Through an observational study, they found no statistically significant relationship between self-reported WTC and actual WTC, suggesting that learners could not accurately predict their WTC without being in a situation where they would communicate. This is perhaps explained by McCroskey and Richmond (1991). "Willingness to communicate is more likely to be influenced by one's perceptions of competence (of which one is usually aware) than one's actual competence (of

which one may not be totally aware)” (p. 27). The situation in which language learners find themselves may determine their self-perceptions of competence at that moment, and thus their WTC.

Although WTC is generally considered to be situationally-determined, MacIntyre and his associates (2001) showed that WTC in the classroom correlated with WTC outside of the classroom. Also, Dornyei and Kormos (2000) found that WTC can depend on a learner’s personality and their level of intrinsic motivation. Both of these studies indicate that WTC may be more dispositionally determined than originally thought.

Motivational Intensity

Though learners’ orientations and specific motivations to learn a second language may differ, research has shown that what matters more than the particular orientation is the motivational intensity the learner displays (Gardner, 1983; MacIntyre & Charos, 1996; Noels, Clement, & Pelletier, 1999; Noels, 2001; Ramage, 1990). Motivational intensity is the overall effort that an individual exerts toward learning a foreign language. Anecdotally, it makes sense that a learner’s motivational intensity would impact his or her learning outcomes. Students with higher motivational intensity show more passion for the topic, working harder to acquire information and achieve their goals; they attend more classes, spend more time on the material outside of class, and search for opportunities to use the information and skills they have acquired.

Much of the research on motivational orientation mentioned above has attempted to draw a direct link between orientation and learning, and indeed have demonstrated this link in some cases (see Masgoret & Gardner, 2003, for a review). Additional research has emphasized the importance of motivational intensity (i.e., motivated behaviors), mediating the relationship

between orientation and learning outcomes (Masgoret & Gardner, 2003). This research has shown that, although some learners strongly endorse a particular orientation toward learning a second language, the relationship between this orientation and their learning outcomes is weak, if they do not show motivational intensity. Motivated behaviors, not a learner's specific orientation, tend to have more influence on learning outcomes. However, although specific orientation may be of lesser importance, learners who show higher levels of a particular orientation tend to display more motivated behaviors than learners with lower levels (Noels, et al., 2000). Additionally, students with lower levels showed lower perceived competence and had lower intention to continue their course of study.

In an examination of motivationally oriented students, Gardner and Lambert (1972) said that there is no reason to expect greater motivational intensity in the integratively-oriented learners compared to the instrumentally-oriented learners. Students with high levels of an orientation (be it integrative or instrumental) should show better performance than those with low levels of either orientation to learn a foreign language. That said, because the goals of the integratively-oriented students are more sustainable, these students have been shown to progress more quickly and are expected to persist longer in their language study.

Social Influences

Because language learning does not occur in a vacuum, any discussion of language learning must consider the learner's social context. This context influences both the learner's approach to language learning and his or her baseline motivation, and it can also impact his or her perseverance in learning. Modeling (Bandura, Ross & Ross, 1961) and reinforcement (Skinner, 1953) have been considered basic psychological principles for how human beings learn. It should be no surprise that early language learning research was built on these

principles. Mowrer (1950) proposed a theory that individuals learn a second language in much the same way that they learn a first language. Speaking specifically about first language acquisition, Mowrer suggested that children hear the language sounds their parents make and imitate those sounds in order to produce their own language. When children make the same sounds as their parents, children receive positive reinforcement. When children do not make the correct sounds, they do not receive such reinforcement. In essence, this theory proposes that we create words and language because we are rewarded. According to Mowrer, language learners acquire a second language in the same way. Learners listen to the language sounds that speakers of the target language make and attempt to imitate them. When learners are successful, they receive the positive reinforcement of understanding and clarity. When they are unsuccessful, there is confusion.

Social Milieu

Mowrer's explanation provides an introduction to the influence of social context on language learning and language learners. More recent research has shown, though, that the influence of the social context is broader and deeper than the earliest work would suggest. One aspect of the impact of the social context is the social milieu (i.e., the beliefs of an individual's social network). Specifically with respect to language learning, if those in a learner's social network (e.g., family, friends, coworkers) believe in the importance of learning foreign languages, then the social milieu toward learning languages is positive. Gardner, Tremblay & Masgoret (1997) showed that the perceptions of parents and other family members are important determinants in a learner's acquisition of a foreign language. They assert that parents can pass on motivational orientations to their children.

Beyond familial influence is the influence of the second language community. The support of the second language community accounts for a significant amount of variance in linguistic competence, use and social affiliation (Genesee, Rogers & Holobow, 1983; Leets & Giles, 1995). If the second language community is supportive and encouraging, the students will be more likely to use the language. If the community is not encouraging, it may be more difficult for students to express themselves in their second language for fear of negative response. It is also important to note that a learner's self-image as a speaker of a second language is determined in part on actual experiences with the target-language community and in part on his or her imagination regarding these interactions (Dornyei, 2005). Harwood, Giles and Bourhuis (1994) showed that the relative dominance of a language learner's group in comparison to the target-language group also influences learning outcomes.

Psychological Freedom and Anomie

Superficially, second language learning appears to be ripe with benefit; however, it can be a double-edged sword. When members of the majority learn the language of the minority, they experience additive bilingualism. This benefits the language learner by adding to his or her language repertoire (Clement, Baker, Josephson & Noels, 2005). On the other hand, when members of the minority learn the language of the majority, they can experience subtractive bilingualism (Varan, 1998). Subtractive bilingualism generally refers to the loss of the need for a learner's first language, but may also include the loss of the societal associations and ethnic identity associated with that language. Given the social pressure to conform to the majority and the lack of association with the minority, it is often easier to maintain the identity of the majority than that of the minority.

Early research on second language learning suggested that individuals could not truly become bilingual unless they felt the psychological freedom to identify with more than one culture. If learners did not experience this freedom, due to a desire to remain true to one culture (for familial or personal reasons), or the inability to shake off the old culture, they would become stuck between the cultures, not being able to completely identify with either, and thus being unable to become bilingual. These feelings can be present in many advanced language learners, most often appearing in those who experience subtractive bilingualism. As language learners proceed in their course of study or as they become part of the target-language culture (Ellis, 2008), they may experience social disconnection called anomie (Lambert, Gardner, Barik & Tunstall, 1963). The theory behind anomie in language learning is that students who progress to fluency in a target language compare the culture of the second language with that of their native language. Through this comparison, advanced learners begin to accept the culture of the second language as their own and begin to deny some of the culture of their first language (Gardner & Lambert, 1972). Oxford (1992) found that losing oneself in the culture of the target language can feel like culture shock, inducing feelings of emotional regression, panic, anger, self-pity, indecision, sadness, alienation, and reduced personality. Often, learners at this stage arrive at a point where they are not able to fully identify with either culture, leaving them disconnected from both.

Group Cohesion

The study of group dynamics is fundamental to the study of social psychology (e.g., Brown, 1988; Forsyth, 1990). Of particular relevance to the study of second language acquisition in a classroom setting is the construct of group cohesion. One of the earliest discussions of group cohesion can be found in Festinger's work on social interaction (1950).

Festinger defined group cohesion as a “resultant of all forces acting on members to remain in the group” (p. 274). He suggested that the attractiveness and prestige of the group itself and of its members, as well as the activities of the group would determine the cohesiveness of the group. If the attraction to the group was nil, there would be no force or pull to keep members in the group. However, as pressures to stay in the group increased, group cohesion would likewise increase.

Forsyth (1990) subsequently defined group cohesion as “the strength of the relationship linking members to one another and to the group itself” (p. 10). Unfortunately, this definition provides little explanation as to why the group might experience cohesion, but rather focuses on the fact that cohesive groups are more closely-knit than non-cohesive groups. In the research on group cohesion, two lines of reasoning have been proposed to explain why certain groups are cohesive and others are not. The first follows the theory of Festinger (1950), suggesting that a group is cohesive when its members are in some way interpersonally attracted to the group or to the other members. A second explanation for group cohesion suggests that groups are cohesive when members share goals and are committed to completing a task (Mullen & Copper, 1994).

Several meta-analyses examining the link between group cohesion and group productivity have shown a small, but significant and reliable link (Evans & Dion, 1991; Gully, Devine & Whitney, 1995). Additionally, Karau and Williams (1997) showed that significantly less social loafing was seen in cohesive groups. They found that individuals felt more connected to cohesive groups and elevated collective goals. In non-cohesive groups, individual goals were seen as paramount, and little effort was exerted to achieve collective goals. It is commitment to

these collective goals, rather than mere interpersonal attraction that seemed to motivate the increased effort.

Mullen and Copper (1994) showed the importance of the reality of the group in the study of group cohesion on performance. They found that as the reality of the group increased, so did the link between group cohesion and performance. For example, they found the strongest link between cohesion and performance in military groups and real sports groups. The effect was present, but not as strong in real, non-sports groups and real, non-military groups. While the relationship persisted among artificial groups, the link was significantly weaker. These findings may help to explain the somewhat weaker than expected relationships discovered in the meta-analyses of group cohesion and group productivity (Evans & Dion, 1991; Gully, et al., 1995) as these analyses combined both laboratory and real-world studies.

Because of its potential impact on the social setting of the classroom, group cohesion is particularly applicable to the study of second language learning. Specifically, research in second language learning has included the impact of group cohesion on motivation and learning outcomes (Clement, Dornyei, & Noels, 1994; Dornyei, 2003; Dornyei & Csizer, 1998; Williams, 1991, cited in Shepperd, 1993). This research has yielded somewhat ambiguous results. Dornyei and Csizer (1998) investigated the impact of group-specific motivational components, including group cohesion and focus on collective goals (goal-orientation), though they did not find these to be of their ten most important strategies for motivation. Dornyei and Kormos (2000) found little relationship between group cohesion and productivity in a second language overall. However, they showed that learners with low task-motivation were less productive when part of a cohesive group. This suggests a negative relationship between group cohesion and effort, at least for this subset of learners.

On the other side of the argument, Clement and his associates (1994) studied 301 secondary-school students of English and 21 instructors in Hungary, investigating the impact of group cohesion—measured both through students’ perception of classroom cohesion and the teacher’s evaluation of the cooperation and cohesion of each class group. Group cohesion was found to have a positive association with the students’ perception of the learning environment. Further, the instructors’ ratings of group cohesion showed a positive association with students’ achievement in English.

Purpose of the Current Study

As the world has become more interconnected, global migration has become nearly routine. This has made learning a foreign language a near necessity. Whether this learning occurs in a classroom setting, through online courses, or through immersion in a social or workplace setting, learning additional languages allows one to better function in the world and communicate beyond one’s own culture. Previous research on motivation to learn a foreign language has focused primarily on learners of foreign languages in scholarly settings, who intend to continue living in their home country. Although this research on language learning has provided incredibly valuable information about the learning process, it has left immigrants and workplace learners relatively unstudied.

Although the number of immigrants to the United States—particularly from Latin American countries—has slowed, the absolute number of immigrants, both documented and undocumented, remains high (Pew Hispanic Center, 2012). This number includes many children—who generally speak fluent English, having known no life outside of the United States. That said, a majority of immigrants speak limited English, yet are in positions where having a greater knowledge of English would provide great benefit. Due to their unique social situation,

their language learning situation is likewise unique. Whereas high school and college students often choose to learn a foreign language to travel, to make friends, to have a greater global mindset, or to obtain a certain job, immigrants very often learn the language of their non-native countries out of necessity. Most immigrants need to learn the language of the nation to which they move in order to become and remain productive members of society and to earn a living. In essence, they need to learn the language to survive.

Research on immigrant learners, particularly with regard to their motivation to learn, is nearly non-existent. As a result, researchers are often led to draw conclusions about immigrant learners based on other potentially similar populations (Gardner & Lambert, 1972) or on motivational theory, rather than on empirical data. Although this research has been helpful in understanding motivations or attitudes that immigrants may be feeling (e.g., instrumental orientation, resentment), studying the motivational patterns of those who have actually migrated is needed to truly fill this gap and provide greater understanding of this population.

Not only has previous research left a hole in the study of language learning by not examining immigrant learners, but due to the focus on scholarly learning, those learning English in the workplace have also been ignored in the research literature. The number of workplace language programs available for study is admittedly small; perhaps this adds to the need for research of this type. The participants in the current study are all learners of English in a workplace setting, and because it is likely that considerable language training in the future, particularly of English, will take place in a workplace setting, it seems important to study this population in this setting to determine the best ways to train these future learners.

In addition to a novel population being studied in a distinct and novel setting, studying learners in the workplace also allows for the collection of novel outcome measures (e.g.,

workplace behaviors as measured by students and supervisors). Previous research has been rather light on concrete learning outcomes. In cases when they have been used, learning outcome measures have included students' grades (e.g., Gardner & Lambert, 1972), teacher reports (e.g., Noels, et al., 1999), observational reports from trained observers (e.g., Guilloteaux & Dornyei, 2008), standardized tests (e.g., Gardner, 2001), and student self-reports of language learning (e.g., Noels, Clement, & Pelletier, 2001). However, some previous studies have failed to draw a link between motivation and learning outcomes, suggesting only that motivational techniques lead to greater motivation on the part of the students or to class engagement (e.g., Dornyei & Csizer, 1998). Although this work is certainly necessary and valuable, it does not address how motivational or community building strategies affect learning outcomes. Research on this topic cannot end with the knowledge that motivation and group cohesion increase motivation and group cohesion; rather, the research must determine whether or not these increases impact learning. If they do not positively impact learning, then it matters little whether motivation and group cohesion increase.

Finally, researching immigrants, particularly in a workplace setting, is necessary because of its social and political implications. As mentioned previously, it is highly likely that any comprehensive immigration reform bill will require undocumented immigrants to show that they are learning or have learned English in order to qualify for the benefits of residency and citizenship. Thus, researching the efficacy of methods for educating immigrants in English, especially in a workplace setting, will provide valuable information on how to do so in the future, and how to do so at a broad scale. Without this preliminary research, it will be impossible to know which methods are most effective in balancing time, cost, and learning.

The primary objective of the current study is to examine the motivations of immigrant workers who are employed in the food service industry and enrolled in a workplace English class provided through their employer. Students will provide ratings of their abilities in English and motivations to learn English at the beginning and end of the course. A second objective will be to determine the influence of a group's cohesion on motivation and language outcomes. Students will provide ratings of the cohesiveness of their group; in the current study, groups are defined as the members of a student's class (some of whom may work in the same restaurant), rather than his or her on-the-job workgroup. The following is a presentation of the hypotheses on which this research endeavor intends to gather information. It is hoped that by acquiring information about these hypotheses, the greater study of the education of immigrant workers and the policy of comprehensive immigration reform can be furthered.

Hypotheses

Hypothesis 1 - Age of Arrival

The majority of the research in second language acquisition suggests that the younger learners are at age of arrival, the better their performance. In this study, this translates into two hypotheses.

- 1a) Students' age of arrival and baseline level of English proficiency will be inversely related.
- 1b) Students' age of arrival and increase in level of English proficiency will be inversely related.

Hypothesis 2 - Integrative Orientation

Students who choose to learn a second language due to an integrative orientation show a genuine passion for the target language and its people. Because of this, students with an integrative orientation are more likely to persevere in their learning, as learning is the goal. This translates into three hypotheses in the present study.

- 2a) Integrative orientation at baseline will be positively related to baseline proficiency in English.
- 2b) Integrative orientation at baseline will be positively related to attendance.
- 2c) Students with higher levels of integrative orientation will be more likely to graduate than those with lower levels.

Hypothesis 3 - Instrumental Orientation

Students who choose to learn a second language due to an instrumental orientation desire to learn the language as a way to achieve other goals. In an immigrant population, there is generally a perceived need to learn English in order to be able to work and to achieve a higher position in one's job. However, among first generation immigrants in particular, there is also a greater desire to hold on to traditional cultural customs. This translates into three hypotheses in the present study.

- 3a) Students' mean instrumental orientation will be higher than their mean integrative orientation.
- 3b) Instrumental orientation will be positively related to attendance.
- 3c) Students with higher levels of instrumental orientation will be more likely to graduate than those with lower levels.

Hypothesis 4 - Ideal Language Self

Students who engage in language learning may see learning a second language as a mechanism of self-betterment. If students believe that learning a second language would bring them more in line with their ideal selves, they may experience greater motivation to continue in their study. This translates into two hypotheses in the present study.

- 4a) Ideal language self will be positively related to attendance.

4b) Students with higher levels of ideal language self will be more likely to graduate than those with lower levels.

Hypothesis 5 - Linguistic Self-Confidence

Students high in linguistic self-confidence hold the belief that they can learn a foreign language. Research has shown that this belief can impact the achievement that students have in language learning. This translates into five hypotheses in the present study.

5a) Baseline linguistic self-confidence will be positively related to baseline proficiency in English.

5b) Linguistic self-confidence will be positively related to language learning outcomes.

5c) Students' linguistic self-confidence will increase from baseline to the end of the program.

5d) Students with higher levels of linguistic self-confidence at baseline will show higher levels of attendance.

5e) Students with higher levels of linguistic self-confidence at baseline will be more likely to graduate.

Hypothesis 6 - Linguistic Anxiety

Linguistic anxiety has been shown to have somewhat differing effects on language learning achievement. In general, though, the literature suggests that students with a high degree of anxiety generally experience inhibited language learning, while those with a low degree of anxiety show greater learning. This translates into five hypotheses in the present study.

6a) Baseline linguistic anxiety will be inversely related to baseline proficiency in English.

6b) Students' linguistic anxiety will decrease from baseline to the end of the program.

6c) Changes in linguistic anxiety will be inversely related to increases in English proficiency.

6d) Students with higher levels of linguistic anxiety at baseline will show lower levels of attendance.

6e) Students with higher levels of linguistic anxiety at baseline will be less likely to graduate.

Hypothesis 7 - Motivational Intensity

Research has suggested that achievement in language learning depends more on the motivational behaviors in which a learner engages than on any particular orientation.

Motivational intensity can come in the form of both attitudes and behaviors. This translates into six hypotheses in the present study.

7a) Integrative orientation will be positively correlated with motivational intensity.

7b) Instrumental orientation will be positively correlated with motivational intensity.

7c) Baseline motivational intensity will be positively correlated with attendance.

7d) Students with higher levels of motivational intensity at baseline will be more likely to graduate.

7e) Student attendance will be positively correlated with language learning outcomes.

7f) Motivational intensity will be positively correlated with language learning outcomes.

Hypothesis 8 - Social Milieu

Research has shown that learners are impacted by the beliefs of family and friends.

Students living in an environment of support regarding language and among people who believe that language learning is important have been shown to have greater success. This translates into three hypotheses in the present study.

8a) Students with higher levels of perceived social milieu and social support will show higher levels of attendance.

8b) Students with higher levels of perceived social milieu and social support will be more likely to graduate.

8c) Students who perceive a higher degree of support in their social network will demonstrate greater language learning outcomes than students who do not.

Hypothesis 9 - Group Cohesion

Research has shown a reliable, if not always robust, link between group cohesion and group performance. Groups that show a commitment to a common goal have been shown to perform better in achieving that goal. This translates into six hypotheses in the present study.

9a) Group cohesion will be positively correlated with motivational intensity.

9b) Motivational intensity will increase more in cohesive groups, compared to non-cohesive groups.

9c) Students with high motivational intensity, who are in highly cohesive groups will show the greatest language learning achievement.

9d) Group cohesion will be positively correlated with course attendance.

9e) At the class level, group cohesion will be positively correlated with attendance rate.

9f) At the class level, group cohesion will be positively correlated with graduation rate.

CHAPTER TWO:

METHOD

Participants

Participants were employees (n = 696) at McDonald's, a quick service restaurant corporation, based in Oak Brook, IL, who had been selected by their supervisors to participate in one of three workplace English as a Second Language classes: (1) English Under the Arches (EUA) Shift Basics—an 8-week course covering basic principles in English (n = 251); (2) EUA Shift Conversation—a 22-week course focusing on the verbal communication that shift-running managers need to use most often (n = 320); and (3) EUA Shift Writing—a 12-week course with an emphasis on the written tasks that shift-running managers need to complete (n = 125). In general, these employees were considered to be high-performers in their restaurants, with the potential to be promoted from hourly employees to salaried managers. All students were immigrants to the United States, descending primarily from North, Central and South American nations¹. All students were native Spanish speakers. The geographical scope of EUA was wide; classes were held in various regions across the United States. At the time of their participation in EUA, students worked in one of the following states or territories: Arizona, California, Colorado, District of Columbia, Florida, Georgia, Illinois, Indiana, Maryland, Nevada, New York, New Jersey, North Carolina, Oklahoma, Oregon, Tennessee, Texas, Virginia, Washington,

¹ Although there has been significant discussion in this work regarding undocumented immigrants and undocumented immigration, to the knowledge of the author, all of the students participating in English Under the Arches have the necessary documentation to live and work in the United States.

Wisconsin. Eighty-two percent of participants were female. The mean age of participants was 31.7 ($SD = 7.4$). Participants were paid at their normal hourly rate for participation in the class.

Program Description

A detailed description of the three EUA courses, including their shared structure and philosophy, as well as each course's unique aspects, is included below:

- 1) Shift Basics is an 8-week course intended for participants possessing the most basic English skills. In general, these students can understand some English, but may only be able to speak several words. Shift Basics is intended to provide basic linguistic skills for students, as preparation for future EUA courses, in particular, Shift Conversation. The primary goal of Shift Basics is to enable students to begin to be able to train employees in English.
- 2) Shift Conversation is a 22-week course intended for participants who already possess basic English skills, and for those who have graduated from the Shift Basics course. The course is divided into four modules: Station Verification (which provides a review of the material covered in Shift Basics), Transition to Management, Area Management and Shift Management. The goal of this course is to increase students' ability to provide training to employees, delegate tasks, give constructive feedback to other employees, engage in conversation with other employees and customers, and to resolve customer complaints, all in English.
- 3) Shift Writing is a 12-week course, which is intended for students who possess conversational skills in English, but have either never learned or need to hone their reading and writing skills in English. This course intends to provide students with the skills they will need to complete the writing tasks associated with running a shift at McDonald's. Among these tasks are completing accident and incident forms and providing guidance to the manager running the subsequent shift through a communication log. A major portion of this class entails the creation

and maintenance of a portfolio of written works. These works are completed weekly and submitted through an online portal.

Each EUA course was structured using the same approach, blending four distinct types of instruction: face to face classes, virtual classes, e-Learning, and on-the-job practice.

1) *Face to Face classes.* Most similar to a regular language learning classroom, face to face classes allowed students to gather in one location for a four-hour session, led by a live instructor. In these classes, instructors employed language learning tools like role plays and partner activities. In the weeks when students had face to face classes, they met for one session.

2) *Virtual classes.* Virtual classes took place in an online setting. Students took classes using the computers in their restaurants' employee breakrooms, and instructors taught synchronously from a remote location. In this manner, one instructor could teach students in multiple locations at simultaneously. Using Genesys Web Meeting software, instructors presented course information to students, who were connected to the online classroom using their restaurant computers. Additionally, instructors provided verbal instruction over the telephone. Thus, students both saw and heard the language instruction, as it was being given by the instructor. Not only could students receive instruction through the virtual class, the software allowed for bidirectional communication. Students could ask questions of the instructor over the telephone as well as chat online with the instructor and other students. In weeks when virtual classes were held, students attended three, hour-long sessions.

3) *E-learning.* E-learning provided students with online activities related to the material they were currently studying in class. These activities focused on grammar, syntax and

pronunciation. Students were provided with one hour per week to complete e-learning activities.

4) *On-the-job practice.* Students were assigned several tasks to complete each week while they were on the job. These activities ranged from engaging in small talk with several other employees to training employees in English. It was expected that students would spend approximately one hour per week completing on-the-job activities.

All three courses were generated using the same philosophy of contextualized learning (e.g., Benesch, 2001; Sticht, Armstrong, Hickey, & Caylor, 1987), which suggests that a second language is best learned when students can apply a context to the language that they are learning, rather than simply acquiring vocabulary through rote memorization. Students who learn in a contextualized manner have been shown to retain a greater amount of information as well as to better synthesize and understand the interconnected nature of the material. Additionally, contextualized learning provides a direct link between the information that is learned in class and how that information will be used outside of class.

Each course was taught by an instructor certified in the Teaching of English to Speakers of Other Languages (TESOL). Each instructor was trained in adult language instruction and received specialized training to teach learners in the workplace. Instructors had varied experience with McDonald's culture, though part of their orientation to the courses was a review of McDonald's operations manuals and a restaurant visit.

Procedure

The first step to participation in EUA classes began with the selection process. Before a class was to begin, work supervisors met with potential students to judge the students' interest in participating in EUA. Part of this process was the completion of a course placement test,

which assisted managers in assigning their employees to the appropriate course. Interested students were then enrolled in one of the three EUA courses. The first day and a half of each course was an orientation, in which students were provided with face to face instruction. As part of the orientation, students learned how to log into their online account. Their online account provided them with access to the virtual classes and to the e-learning content.

During the orientation, students were provided with a five-page questionnaire, containing a battery of measures, described in detail below. These measures were designed to assess students' self-reported proficiency in English, ability to complete on-the-job tasks, motivation for pursuing training in English, and demographic information. To further gauge baseline English proficiency, students in Shift Basics and Shift Conversation underwent a standardized English test, performed by a certified test administrator. At the end of the program, students received a four-page questionnaire, assessing the same dimensions as at baseline. In addition, students in Shift Basics and Shift Conversation were again tested using the standardized English assessment.

At both the orientation and at the end of the program, students' supervisors received two-page questionnaires, designed to assess their perceptions of students' proficiency in English and ability to complete workplace activities.

Measures

Oral Language Proficiency

The oral language proficiency in English of students in Shift Basics and Shift Conversation is assessed using the *Basic English Skills Test (BEST) Plus* oral interview computer-adaptive version (Center for Applied Linguistics, 2005). The *BEST Plus* is an individually administered face-to-face scripted oral interview, intended to assess interpersonal communication of adult

nonnative speakers of English, using everyday language. The test is specifically designed for learners of English who may or may not have received an education in their native language or in English, but who need to use English to function in day-to-day life in the United States.

Trained individuals administer the examination in a conversational format. Below is an excerpt from *BEST Plus* Test Administrator Guide (Center for Applied Linguistics, 2005), explaining the process of test administration.

BEST Plus begins with warm-up items intended to make the examinee feel comfortable conversing with the test administrator. These include personal information questions that are commonly asked of English language learners (e.g., What language do you speak?). The responses to the warm-up questions count toward the final *BEST Plus* score. The examinees are then administered questions drawn from several “folders” of questions. Each folder contains seven thematically related questions, including one photo-based question. The content of the questions is drawn from three language-use domains—personal (personal identification, health, family/parenting, consumerism, housing, recreation/entertainment) occupational (getting a job, on the job), and public (civics, community services, transportation/directions, weather/seasons, education)—that form the framework for thematically-related folders. These domains represent spheres of social interaction of adult language learners (Council of Europe, 1996; Stein, 1997). Each of these domains is subdivided into more specific areas of language use. The total item pool consists of more than 250 items. Only certain questions from each folder are administered to an examinee. In the computer-adaptive version, the questions are based on the computer program’s estimate of the examinee’s ability.

For each test question, the test administrator’s script appears on the computer screen. The test administrator reads each item on the screen to the examinee in a conversational manner, waits for a response, evaluates the response using the *BEST Plus Scoring Rubric* (described in detail below), and then enters the scores in the computer. The computer program begins estimating the examinee’s ability as soon as the test administrator enters the scores for the first item of the warm-up. This estimate is updated after each question is scored. All responses, including those from the warm-up, are used in determining the final *BEST Plus* score. The computer-adaptive program stops presenting test items when there is adequate input to determine the examinee’s score. Because of the adaptive nature of the test and the large underlying item pool, the test items and sequence of items vary each time the test is administered (pp. 3-5).

The *BEST Plus* is scored on three aspects of language: Listening Comprehension, Language Complexity, and Communication. Listening comprehension refers to how well the examinee

understands the test item. Language complexity refers to how the examinee organizes and elaborates the response. Communication refers to how clearly the examinee communicates meaning. Below is the *BEST Plus* scoring rubric:

Listening Comprehension	2	Response indicates appropriate understanding of the setup and question without repetition (though examinee may have checked comprehension)
	1	Setup and question need to be repeated before examinee responds appropriately, or response indicates partial understanding of setup and question
	0	Response indicates complete misunderstanding of setup and question (even with one repetition) or no response, response incomprehensible or response inappropriate
Language Complexity	4	Sustains a variety of structures, develops an idea in detail (using reasons, examples, explanations, descriptions, etc.); vocabulary more precise; response cohesive and often organized
	3	Uses strings of several sentences to provide additive detail, often through phrases and clauses (e.g., prepositional phrases, adverbial clauses, subordination); elaboration clearly beyond minimum
	2	Uses long strings of phrases or well-formed sentences with emerging complexity (e.g., use of “because,” “if,” “but”) to provide some additional detail that is minimal but beyond basic
	1	Words, phrases, or simple sentences (i.e., S-V-O) used to provide basic information with no elaboration; limited vocabulary
	0	No response, response incomprehensible or response inappropriate
Communication	3	Response is comprehensible and easy to understand (despite inaccuracies, the listener does not need to fill in understanding meaning.)
	2	Response is comprehensible but sporadically difficult to understand (From time to time, the listener needs to fill in to understand meaning.)
	1	Response is comprehensible but generally difficult to understand (Much effort is required by the listener to fill in to understand meaning. Confusions may exist.)
	0	No response, response incomprehensible or response inappropriate

Based on the scores recorded by the administrator, the computer-adaptive questionnaire provides a test score on a scale from 0-10. Students were examined using *BEST Plus* at baseline and at the end of the program. In the current study, the mean score at baseline was 3.02 ($SD =$

1.95) in the Shift Basics course and 4.97 ($SD = 1.63$) in the Shift Conversation course. At the end of the program, the mean score was 4.36 ($SD = 1.87$) in the Shift Basics course and 5.63 ($SD = 1.61$) in the Shift Conversation course.

Students' Questionnaire

The student questionnaire was created in English and translated into Spanish by trained translators. It was then back-translated by a separate set of trained translators to assure that the meaning was the same in Spanish and in English. This questionnaire was divided into three sections. In the first section of the questionnaire the students received, they were asked to provide self-ratings on their proficiency in English, the frequency with which they used English, as well as demographic information.

English proficiency

Students were asked to rate their proficiency at reading, writing, understanding, speaking and pronouncing English on a five-point scale. The anchors to the scale are "I can't do it," and "Excellent." The points in between are labeled as "Not very well," "More or less," and "Well." Students provide ratings on these items at baseline and at the end of the program. At baseline, mean scores were 2.32 ($SD = .62$) in Shift Basics, 2.61 ($SD = .56$) in Shift Conversation, and 2.95 ($SD = .62$) in Shift Writing and the reliabilities were $\alpha = .835$, $\alpha = .832$, and $\alpha = .861$, respectively. At the end of the program, the mean scores were 2.80 ($SD = .61$) in Shift Basics, 3.16 ($SD = .59$) in Shift Conversation, and 3.54 ($SD = .62$) in Shift Writing; the reliabilities were $\alpha = .845$, $\alpha = .86$, and $\alpha = .908$, respectively.

Frequency of English use

Students were asked to provide the frequency with which they spoke English with co-workers, with managers, with customers, on the telephone and overall on a five-point scale (1 =

“Never,” 2 = “Rarely,” 3 = “Sometimes,” 4 = “Frequently,” and 5 = “Always”). Students provided ratings on these items at baseline and at the end of the program. At baseline, mean scores were 2.79 ($SD = .94$) in Shift Basics, 3.25 ($SD = .83$) in Shift Conversation, and 3.71 ($SD = .81$) in Shift Writing and the reliabilities were $\alpha = .807$, $\alpha = .798$, and $\alpha = .777$, respectively. At the end of the program, the mean scores were 3.24 ($SD = .88$) in Shift Basics, 3.70 ($SD = .82$) in Shift Conversation, and 4.05 ($SD = .71$) in Shift Writing; the reliabilities were $\alpha = .758$, $\alpha = .784$, and $\alpha = .795$, respectively.

Demographic information

Students provided demographic information including their country of origin, current age, number of years living in the United States, as well as level of education completed in their country of origin as well as in the United States.

Assessment of Workplace Behaviors

The second section of the questionnaire varied slightly depending on the class in which students were enrolled. Students in Shift Basics and Shift Conversation were asked to rate their ability to complete thirteen spoken workplace tasks on a five-point scale. For ease of student response, a fuller set of response options was generated. The response options are included below:

- A) I can't do this. It's much too difficult.
- B) It's difficult. I can only do this with a lot of help from others.
- C) This is difficult for me, but I can do it with a little help from others.
- D) I can do this most of the time, except when things are too complicated.
- E) I can do this. It is not a problem.

The items included on this questionnaire are included below:

- 1) “Talk in English with my supervisor about work”
- 2) “Talk in English with my co-workers about work”
- 3) “Start a conversation with English-speaking customers”

- 4) "Resolve a customer complaint by myself in English"
- 5) "Talk in English with my co-workers about myself"
- 6) "Talk in English about life, the weather, sports (i.e., small talk)"
- 7) "Read directions or work orders that are written in English"
- 8) "In English, call the restaurant when I am sick"
- 9) "Understand how the company works"
- 10) "Answer the telephone in English"
- 11) "Make a phone call in English to an outside contact"
- 12) "Write notes for others in English that is not perfect"
- 13) "Write notes for others in pretty good English"

At baseline, mean scores were 2.89 ($SD = .89$) in Shift Basics, and 3.43 ($SD = .78$) in Shift

Conversation, and the reliabilities were $\alpha = .933$, and $\alpha = .929$, respectively. At the end of the program, the mean scores were 3.40 ($SD = .81$) in Shift Basics, and 3.99 ($SD = .64$) in Shift

Conversation; the reliabilities were $\alpha = .929$, and $\alpha = .895$, respectively.

Students in Shift Writing were asked to rate their ability to perform thirteen written workplace tasks on a six-point scale. The response options are included below. If students provided response "A," this item was not considered in the analysis.

- A) I have never been trained to do this.
- B) I can't do this. It's much too difficult.
- C) It's difficult. I can only do this with a lot of help from others.
- D) This is difficult for me, but I can do it with a little help from others.
- E) I can do this most of the time, except when things are too complicated.
- F) I can do this. It is not a problem.

The items included on this questionnaire are included below:

- 1) "Leaving hand-written phone messages"
- 2) "Leaving hand-written updates for other managers"
- 3) "Completing an Accident Report Form"
- 4) "Completing a Customer Incident Form"
- 5) "Resolution to a customer complaint"
- 6) "Documenting employees availability"
- 7) "Reporting cash overages and shortages"
- 8) "Requesting repairs to equipment"
- 9) "Requests for schedule changes"
- 10) "Reminders to crew to use safety equipment or follow safety procedures"
- 11) "Reporting items with low stock levels"

- 12) "Providing updates to other managers"
- 13) "Documenting supply exchanges with other stores"

Students in all courses provided responses to their respective items at baseline and at the end of the program. At baseline, mean score was 4.79 ($SD = .95$) and the reliability was $\alpha = .947$. At the end of the program, the mean score was 5.38 ($SD = .81$) and the reliability was $\alpha = .972$.

Assessment of Motivation.

In the third section of the questionnaire, a variety of orientations, attitudes and anxiety constructs were assessed through items arranged using block randomization (Bailey, 1983). Students indicate the intent to which they agree or disagree with a statement using a 5-point rating scale. The scale was anchored at one end by 1 = *Strongly Disagree* and at the other end by 5 = *Strongly Agree*. A high score, therefore, indicated agreement with the item.

Integrative orientation

Three items assessed students' integrative orientation for learning English (e.g., "I want to learn English, so I can participate in American culture (television, music)"). The items were created using the definition proposed by Clement (1988), with a heavier focus on acculturation, as opposed to an affinity for speakers of English. These items were used at baseline (Shift Basics: $M = 3.75$; $SD = 1.03$; $\alpha = .622$; Shift Conversation: $M = 3.59$; $SD = 1.19$; $\alpha = .716$; Shift Writing: $M = 3.69$; $SD = 1.13$; $\alpha = .706$) and at the end of the program (Shift Basics: $M = 3.45$; $SD = 1.07$; $\alpha = .734$; Shift Conversation: $M = 3.59$; $SD = 1.13$; $\alpha = .731$; Shift Writing: $M = 3.44$; $SD = 1.24$; $\alpha = .821$). A higher mean score indicated a higher integrative orientation to learn English.

Instrumental orientation for the workplace

Three items assessed students' instrumental orientation related to the workplace (e.g., "I am not able to grow in my job unless I learn English well."). These items were modified from a

version used by Kruidenier and Clement (1986). These items were used at baseline (Shift Basics: $M = 4.5$; $SD = .57$; $\alpha = .353$; Shift Conversation: $M = 4.53$; $SD = .62$; $\alpha = .427$; Shift Writing: $M = 4.25$; $SD = .87$; $\alpha = .627$) and at the end of the program (Shift Basics: $M = 4.40$; $SD = .72$; $\alpha = .548$; Shift Conversation: $M = 4.35$; $SD = .81$; $\alpha = .66$; Shift Writing: $M = 4.25$; $SD = .88$; $\alpha = .566$). A higher mean score indicated a higher instrumental orientation related to the workplace.

Instrumental orientation for family

Three items assessed students' instrumental orientation related to family (e.g., "It is important to know English to be able to help my family with everyday activities."). These items were also modified from a version used by Kruidenier and Clement (1986). They were used at baseline (Shift Basics: $M = 4.72$; $SD = .48$; $\alpha = .619$; Shift Conversation: $M = 4.69$; $SD = .55$; $\alpha = .775$; Shift Writing: $M = 4.60$; $SD = .64$; $\alpha = .562$) and at the end of the program (Shift Basics: $M = 4.53$; $SD = .64$; $\alpha = .642$; Shift Conversation: $M = 4.50$; $SD = .70$; $\alpha = .684$; Shift Writing: $M = 4.47$; $SD = .73$; $\alpha = .709$). A higher mean score indicated a higher instrumental orientation related to family.

Ideal language self

One item assessed students' beliefs about their own motivation to reduce the discrepancy between their actual selves and ideal selves with respect to language learning ("I want to learn English to be a better person."). This item is used at baseline (Shift Basics: $M = 4.67$; $SD = .81$; Shift Conversation: $M = 4.58$; $SD = .96$; Shift Writing: $M = 4.14$; $SD = 1.39$) and at the end of the program (Shift Basics: $M = 4.57$; $SD = .93$; Shift Conversation: $M = 4.19$; $SD = 1.31$; Shift Writing: $M = 4.0$; $SD = 1.41$). A higher mean score indicated a higher ideal language self.

Linguistic self-confidence

Two items assessed students' beliefs about their ability to learn English (e.g., "I believe that I can learn English well."). This scale was adapted from Ryan and Connell (1989). These items were used at baseline (Shift Basics: $M = 4.41$; $SD = .63$; $\alpha = .32$; Shift Conversation: $M = 4.51$; $SD = .58$; $\alpha = .35$; Shift Writing: $M = 4.67$; $SD = .49$; $\alpha = .189$) and at the end of the program (Shift Basics: $M = 4.45$; $SD = .58$; $\alpha = .379$; Shift Conversation: $M = 4.52$; $SD = .56$; $\alpha = .462$; Shift Writing: $M = 4.73$; $SD = .48$; $\alpha = .623$). A higher mean score indicated higher linguistic self-confidence.

Linguistic anxiety

One item assessed the anxiety that students feel when speaking English (e.g., "Normally, I am afraid to speak English."). This item was used at baseline (Shift Basics: $M = 3.70$; $SD = 1.23$; Shift Conversation: $M = 3.41$; $SD = 1.30$; Shift Writing: $M = 3.00$; $SD = 1.47$) and at the end of the program (Shift Basics: $M = 3.38$; $SD = 1.25$; Shift Conversation: $M = 3.09$; $SD = 1.36$; Shift Writing: $M = 2.65$; $SD = 1.53$). A higher mean score indicates higher linguistic anxiety related to speaking English.

Social milieu

Three items assessed students' perceptions of the social milieu around language learning (e.g., "My family believes that it is important for me to learn English."). These items were modified from a version used by Dornyei and Csizer (2002). They were used at baseline (Shift Basics: $M = 4.81$; $SD = .42$; $\alpha = .569$; Shift Conversation: $M = 4.81$; $SD = .42$; $\alpha = .648$; Shift Writing: $M = 4.83$; $SD = .35$; $\alpha = .301$) and at the end of the program (Shift Basics: $M = 4.75$; $SD = .45$; $\alpha = .352$; Shift Conversation: $M = 4.82$; $SD = .34$; $\alpha = .436$; Shift Writing: $M = 4.78$; $SD = .42$; $\alpha = .595$). A higher mean score indicated a higher social milieu to learn English.

Perceived social support

Three items assessed students' perceptions of the social support they receive for learning English (e.g., "When I ask for help with English, many people in my work help me."). These items were modified from a version used by Dornyei and Csizer (2002). These items were used at baseline (Shift Basics: $M = 3.76$; $SD = .73$; $\alpha = .359$; Shift Conversation: $M = 3.78$; $SD = .76$; $\alpha = .38$; Shift Writing: $M = 3.83$; $SD = .74$; $\alpha = .356$) and at the end of the program (Shift Basics: $M = 3.80$; $SD = .81$; $\alpha = .442$; Shift Conversation: $M = 3.87$; $SD = .78$; $\alpha = .368$; Shift Writing: $M = 4.00$; $SD = .67$; $\alpha = .139$). A higher mean score indicated a higher instrumental orientation to learn English. This scale showed very low reliability.

Motivational intensity

Three items were selected from Gardner (1985) to assess the extent to which students exerted effort to learn English (e.g., "I will work very hard to learn English."). These items were used at baseline (Shift Basics: $M = 4.83$; $SD = .36$; $\alpha = .74$; Shift Conversation: $M = 4.88$; $SD = .34$; $\alpha = .792$; Shift Writing: $M = 4.87$; $SD = .35$; $\alpha = .648$) and at the end of the program (Shift Basics: $M = 4.21$; $SD = .65$; $\alpha = .55$; Shift Conversation: $M = 4.37$; $SD = .68$; $\alpha = .686$; Shift Writing: $M = 4.54$; $SD = .64$; $\alpha = .635$). A higher mean score indicated higher motivational intensity.

Group cohesion

Six items assess students' feelings of group cohesion, using the definition of commitment to a common goal (Mullen & Copper, 1994) (e.g., "It is important that everyone in this class learns English."). Because students could not have a valid understanding of the cohesion of their group at the beginning of the class, group cohesion was only measured at the end of the program (Shift Basics: $M = 4.68$; $SD = .41$; $\alpha = .687$; Shift Conversation: $M = 4.77$; $SD = .34$; $\alpha = .711$; Shift Writing: $M = 4.88$; $SD = .25$; $\alpha = .768$).

Supervisors' Questionnaire

The supervisor questionnaire was divided into two sections. In the first section of the questionnaire the supervisors received, they were asked to provide ratings on their students' proficiency in English, the frequency with which they used English, and the confidence with which they spoke English.

English proficiency

Supervisors were asked to rate each of their students' proficiency at reading, writing, understanding, and speaking English on the same five-point scale, as was used by the students (1 = "He/she can't do it;" 5 = "Excellent"). Supervisors provided ratings on these items at baseline (Shift Basics: $M = 2.50$; $SD = 1.21$; $\alpha = .396$; Shift Conversation: $M = 2.90$; $SD = .91$; $\alpha = .609$; Shift Writing: $M = 3.17$; $SD = .66$; $\alpha = .846$) and at the end of the program (Shift Basics: $M = 3.06$; $SD = .78$; $\alpha = .907$; Shift Conversation: $M = 3.55$; $SD = .52$; $\alpha = .782$; Shift Writing: $M = 3.92$; $SD = .53$; $\alpha = .784$).

Frequency of English use

Supervisors were asked to provide the frequency with which their students spoke English with co-workers, with managers, with customers, on the telephone and overall on the same five-point scale as was used by the students (1 = "Never;" 5 = "Always"). Supervisors provided ratings on these items at baseline (Shift Basics: $M = 2.54$; $SD = .85$; $\alpha = .862$; Shift Conversation: $M = 2.92$; $SD = .89$; $\alpha = .901$; Shift Writing: $M = 3.22$; $SD = .76$; $\alpha = .845$) and at the end of the program (Shift Basics: $M = 3.22$; $SD = .77$; $\alpha = .787$; Shift Conversation: $M = 3.81$; $SD = .70$; $\alpha = .865$; Shift Writing: $M = 3.86$; $SD = .66$; $\alpha = .812$).

Confidence in English

Supervisors were asked to rate the confidence with which their students spoke English with co-workers, with managers, with customers, on the telephone and overall on a five-point scale. Supervisors provided ratings on these items at baseline and at the end of the program. The anchors to the scale are “Not at all,” and “Completely confident.” The points in between are labeled as “A little bit confident,” “Somewhat confident,” and “Quite confident.”

Supervisors provided ratings on these items at baseline (Shift Basics: $M = 2.22$; $SD = .86$; $\alpha = .912$; Shift Conversation: $M = 2.75$; $SD = .94$; $\alpha = .945$; Shift Writing: $M = 3.13$; $SD = 1.01$; $\alpha = .953$) and at the end of the program (Shift Basics: $M = 3.13$; $SD = .93$; $\alpha = .908$; Shift Conversation: $M = 3.74$; $SD = .77$; $\alpha = .883$; Shift Writing: $M = 3.99$; $SD = .79$; $\alpha = .921$).

Assessment of workplace behaviors

The second section of the questionnaire varied in content depending on the course, though in each course, this section assessed supervisor ratings of students’ behaviors in the workplace. Supervisors of students in Shift Basics and Shift Conversation were asked to rate students’ ability to complete the same thirteen spoken workplace tasks, using the same five-point scale. Supervisors provided ratings on these items at baseline (Shift Basics: $M = 2.52$; $SD = .94$; $\alpha = .966$; Shift Conversation: $M = 3.18$; $SD = .94$; $\alpha = .971$) and at the end of the program (Shift Basics: $M = 3.38$; $SD = .89$; $\alpha = .965$; Shift Conversation: $M = 4.01$; $SD = .42$; $\alpha = .87$).

Supervisors of students in Shift Writing were asked to rate students’ ability to complete the same thirteen written workplace tasks, using the same six-point scale. Supervisors provided ratings on these items at baseline ($M = 4.26$; $SD = 1.11$; $\alpha = .948$) and at the end of the program ($M = 4.97$; $SD = .79$; $\alpha = .973$).

Motivated Behaviors

Student-level attendance

The number of class hours students completed constituted their attendance. Students received four class hours for attending a face to face session, and one hour for attending a virtual class. Attendance was calculated by the number of class hours that a student had completed, divided by the number of hours he or she could possibly complete in the class (Shift Basics: $M = 87.7\%$; $SD = 18.6\%$; Shift Conversation: $M = 76.0\%$; $SD = 25.8\%$; Shift Writing: $M = 73.6\%$; $SD = 25.0\%$).

Class-level attendance rate

This measure used class as the unit of analysis. Class attendance was calculated by taking the total number of class hours completed by students in the course, divided by the number of hours that could have been completed by all students (Shift Basics: $M = 87.9\%$; $SD = 10.2\%$; Shift Conversation: $M = 78.0\%$; $SD = 13.3\%$; Shift Writing: $M = 73.2\%$; $SD = 13.3\%$).

Graduation rate

This measure used class as the unit of analysis. Graduation rate was calculated by taking the number of students who completed at least 75% of the course hours, divided by the total number of students who began the class (Shift Basics: $M = 92.0\%$; $SD = 10.9\%$; Shift Conversation: $M = 85.3\%$; $SD = 11.5\%$; Shift Writing: $M = 77.7\%$; $SD = 18.3\%$).

CHAPTER THREE:

RESULTS

Preliminary Analyses

Treatment of Missing data

In order to put the analyses of the current study in context, the treatment of missing data must be addressed. In the current study, if data was available for a particular analysis, it was used. This meant that not all analyses used the same sample of data. Specifically, for analyses which investigated baseline relationships, larger sample sizes were used compared to analyses which measured pre-post change¹. If we had only used the sample of participants with complete data for all analyses, we would have had a consistent set of data. However, we would have likely been excluding a particular subset of the population that needed to be represented. This would have been detrimental to the study as a whole. By using all available data for each analysis, we acknowledge that we are using different samples, but we preserve greater generalizability.

Manipulation Checks

Before determining if cognitive, social and motivational variables impacted language learning gains, it was first necessary to show that students had experienced language learning gains. Paired-samples t-tests comparing the baseline and post-program scores on each of the

¹ This is particularly the case when dealing with supervisor data. Although the sample size of supervisor data was generally sufficient at baseline, it was almost non-existent at the end of the program, making pre-post comparisons unreliable. Significant findings should be interpreted through this lens.

outcome measures showed significant performance gains across the three courses for the standardized measure and the self-report measures (all $ps < .036$). Among the supervisor-report measures, there were significant ratings in Shift Basics for frequency, confidence and workplace behavior ($ps < .001$) and in Shift Writing for proficiency and confidence ($ps < .045$). Table 1 shows the results of these tests.

It was also important to determine how the various outcome measures were related to one another, particularly at baseline. Simple correlations were performed among all baseline measures. The standardized measure of proficiency in English was significantly correlated with all baseline self-report measures. Additionally, each of these self-report measures (proficiency in English, frequency in using English, and workplace behaviors) were significantly correlated with one another. The results of these correlations can be found in Table 2. Similarly, the standardized measure was significantly correlated with all of the baseline supervisor-report measures. These measures (proficiency in English, frequency in using English, confidence in using English, and workplace behaviors) also showed significant correlations with one another. These correlations can be found in Table 3. Finally, we used simple correlations to compare the self-report measures with the corresponding supervisor-report measures. Significant results were found in every relationship except two in the Shift Writing course. The relationships between self-report and supervisor-report measures of baseline proficiency and frequency were not found to be significant, $r(22) = .205, p = .36$, and $r(22) = .359, p = .101$, respectively. Both of these relationships would have likely reached significance with larger sample sizes. These correlations can be found in Table 4.

Finally, we wanted to determine if baseline proficiency in English was significantly related to course attendance. Simple correlations between baseline measures of English

proficiency and attendance figures revealed several significant findings. These correlations are presented in Table 5. In the Shift Basics course, the standardized measure of English proficiency, as well as the self-report measures of proficiency and workplace behaviors as measured by the Can Do list showed significant positive relationships with attendance, $r(189) = .201, p = .005$, $r(248) = .137, p = .031$, and $r(248) = .133, p = .035$, respectively. In the Shift Conversation course, there was a significant inverse relationship between the baseline supervisor rating of workplace behaviors on the Can Do list and attendance, $r(80) = -.271, p = .015$. Finally, in the Shift Writing course, there were significant positive correlations between frequency of English usage and workplace behaviors as measured by the Can Write list with attendance, $r(22) = .425, p = .049$, and $r(18) = .604, p = .008$, respectively. In short, it appears that the most consistent relationships between baseline measures of English usage and attendance were found in the Shift Basics course. In this course, students who rated themselves as more advanced at baseline attended more classes.

Planned Analyses

Hypothesis 1

Hypothesis 1A - Students' age of arrival and baseline level of English proficiency will be inversely related.

To examine whether students' age of arrival was inversely related to their baseline proficiency and frequency in using English, we performed several simple correlations between age of arrival and each of the baseline measures of language proficiency (i.e., the standardized measure of proficiency, the self-report measures, and the supervisor-report measures). These correlations are presented in Table 6.

There were several significant relationships between age of arrival and the self-report measures. In the Shift Basics course, age of arrival was inversely related to a baseline measure of frequency of speaking English, $r(240) = -.142, p = .028$. The same relationship was not significant in either the Shift Conversation or Shift Writing courses. The other significant finding was in the Shift Writing course, where there was an inverse relationship between age of arrival and baseline proficiency in English, $r(119) = -.299, p = .001$. This relationship was not seen in the other courses. No other significant relationships were found between age of arrival and the other self-report measures ($ps > .076$).

The relationship between age of arrival and the standardized measure was not significant in either course where it was tested ($ps > .132$). The examination of the relationship between age of arrival and supervisor ratings did not yield any significant findings ($ps > .094$).

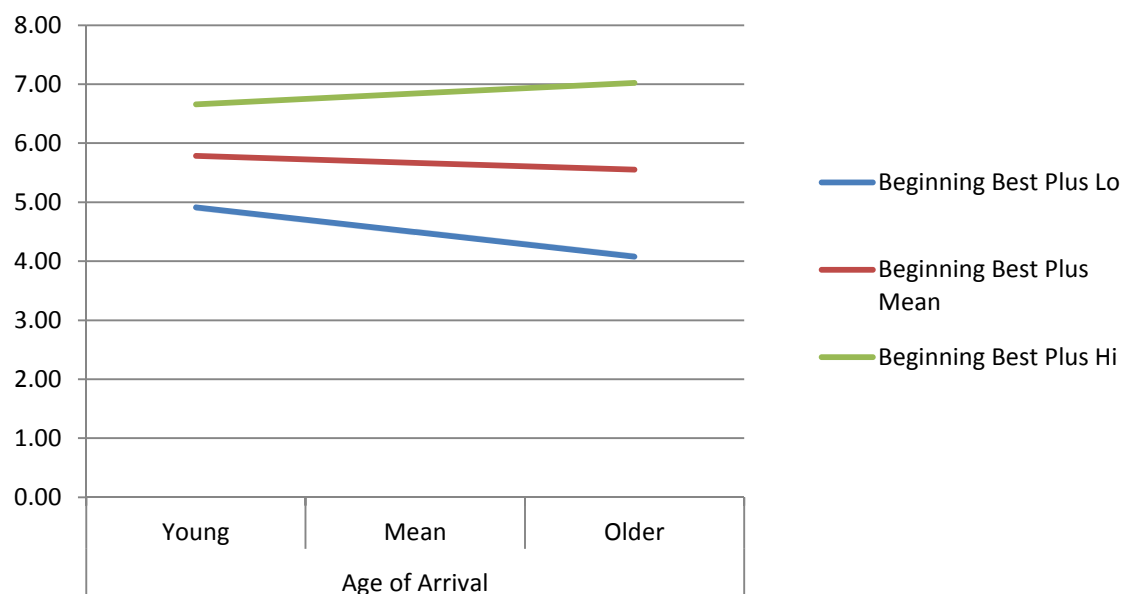
Hypothesis 1B - Students' age of arrival and increase in level of English proficiency will be inversely related.

In order to test the relationship between age of arrival and student gains in English across the duration of the course, regression models were generated for each of the outcome measures. The results of these tests are shown in Tables 7-16. For each variable, the predictors of post-program score were centered baseline score on the measure being tested, centered age of arrival and the centered interaction term between these variables. For each measure, baseline score served as a significant predictor of post-program score.

In the Shift Conversation course, age of arrival was a significant predictor of supervisor-ratings of improvement in confidence, $\beta = -.655, t(9) = -2.543, p = .044$. Supervisors rated students with an earlier age of arrival as showing greater improvement in confidence.

Additionally, in this course, for the standardized language assessment, the interaction term was significant, $\beta = .195$, $t(149) = 3.429$, $p = .001$. This suggests that baseline score on the standardized measure of language proficiency moderated the relationship between age of arrival and post-program score on the standardized measure. The slope of the line regressing post-program performance on age of arrival at one standard deviation above the mean baseline performance was 0.029, suggesting that participants with better baseline performance were less likely to improve at an earlier age of arrival. The slope at one standard deviation below the mean was -0.067. This suggests that participants with worse baseline performance were more likely to improve at an earlier age of arrival. This relationship can be seen in Figure 1.

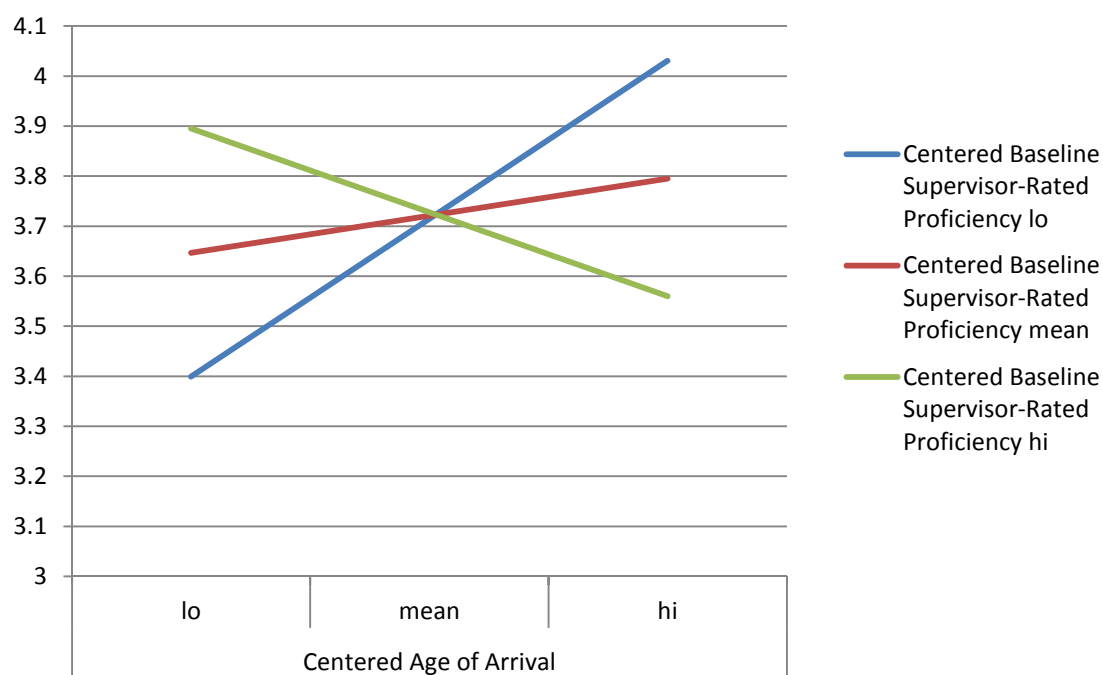
Figure 1. Post-program score on the standardized measure of English proficiency as a function of baseline score on the measure and students age of arrival in the Shift Conversation course.



Finally, in Shift Conversation, the interaction term between supervisor-rating of proficiency and age of arrival was significant, $\beta = -1.096$, $t(9) = -3.144$, $p = .02$. This suggests that the baseline supervisor rating of proficiency moderated the relationship between age of arrival

and post-program score on the supervisor rating of proficiency. The slope of the line regressing post-program supervisor ratings of proficiency on age of arrival at one standard deviation above the mean baseline supervisor rating was -0.027, suggesting that participants with higher supervisor-rated proficiency at baseline were more likely to improve at an earlier age of arrival. The slope at one standard deviation below the mean was 0.051. This suggests that participants with lower supervisor-rated proficiency at baseline less likely to improve at an earlier age of arrival. This relationship can be seen in Figure 2.

Figure 2. Post-program score on the supervisor-report measure of proficiency as a function of baseline score on the measure and students' age of arrival in the Shift Conversation course.



Hypothesis 1 - Discussion

Primarily, the results of these analyses did not suggest a robust relationship between students' age of arrival and their baseline level of English proficiency or usage, nor consistent relationships between students' age of arrival and their improvements throughout the class.

Although a significant relationship was seen between age of arrival and baseline frequency of speaking English in the Shift Basics course, and between age of arrival and baseline proficiency in English in the Shift Writing course, neither of these relationships were consistent across all courses. Additionally, the relationships between age of arrival and baseline measures of English proficiency and usage were not supported by supervisor ratings or the standardized measure, where no significant patterns were discovered between age of arrival and English proficiency and usage.

One likely explanation for the lack of significant correlations between age of arrival and baseline measures of English proficiency and frequency was the fact that students were assigned to particular courses based on their level of proficiency in English. Therefore, within each course, there was limited variability on the measures of proficiency and frequency. This could have very well attenuated the relationships between these variables and age of arrival.

It was our desire to explore the relationship between age of arrival and baseline measures without restricting the ranges of the latter. To do this, we performed the same set of correlations, this time combining data across courses. The results of this analysis were statistically significant for the relationships between age of arrival and the standardized measure ($r(453) = -.115, p = .014$), and the self-reported measures of proficiency ($r(670) = -.097, p = .012$) and frequency ($r(670) = -.095, p = .014$), but not for the measures of spoken workplace behaviors. Age of arrival was also found to be significantly related to baseline supervisor ratings of student confidence to speak English ($r(226) = -.143, p = .031$). The results of this analysis can be found in Table 16.

With respect to the relationships between age of arrival and language gains, the hypotheses were not supported in general. The only significant finding with substantial sample

size was an interaction in the Shift Conversation course between age of arrival and gains in English on the standardized measure. One possible explanation for this interaction, consistent with previous research on the topic (Bialystok & Hakuta, 1999), is that students with lower baseline proficiency progress more quickly if they arrived at a younger age, due to their greater exposure to English, and their greater degree of linguistic readiness at first exposure to English. Contrary to the research is the finding that students with a later age of arrival who entered the course with greater proficiency showed greater progress than students who arrived at a younger age. It is possible that baseline proficiency may be important than age, when students are already at a higher level. High baseline proficiency may more easily breed greater proficiency. Although this explanation is plausible, it would have greater credibility if the same pattern were seen across multiple measures.

Hypothesis 2

Hypothesis 2A - Integrative orientation at baseline will be positively related to baseline proficiency in English.

To examine whether students' baseline integrative orientation was positively related to their proficiency and frequency in using English at baseline, we performed several simple correlations between integrative orientation and each of the baseline measures of language proficiency and frequency. All of the correlations can be found in Table 17.

There were several significant relationships between baseline integrative orientation and the baseline measures. In the Shift Conversation course, significant positive relationships were found between integrative orientation and self-ratings of frequency to speak English, $r(316) = 0.150, p = .007$, and between integrative orientation and self-ratings of workplace behaviors, $r(316) = 0.125, p = .027$. In the Shift Basics course, there was a significant relationship

between integrative orientation and supervisor ratings of frequency to speak English, $r(119) = 0.213, p = .02$. There was also a non-significant positive trend found between integrative orientation and self-ratings of proficiency in English, $r(244) = .123, p = .054$. There were no significant relationships in the Shift Writing course.

Hypothesis 2B - Integrative orientation at baseline will be positively related to attendance.

In order to determine if there was a positive relationship between baseline integrative orientation and course attendance, we ran simple correlations. These correlations, found in Table 18, did not indicate a significant positive relationship in any of the three courses ($ps > .112$).

Hypothesis 2C - Students with higher levels of integrative orientation will be more likely to graduate than those with lower levels.

In order to determine if baseline integrative orientation impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and baseline integrative orientation as the predictor variable. The models did not yield significant results in any of the courses. There was a non-significant trend in the Shift Basics class, $b = .393, p = .055, \text{Exp}(B) = 1.481$. This suggests that a one-point increase on the integrative orientation scale would increase the likelihood of graduation 1.481 times. The results of this analysis can be found in Table 19.

Hypothesis 2 - Discussion

The lack of consistent significant correlations between baseline integrative orientation and baseline proficiency and frequency in speaking English was counter to hypotheses and rather surprising. It was thought that students with a higher baseline integrative orientation would demonstrate consistently higher levels of English proficiency and frequency; students

with higher levels of baseline integrative orientation, particularly using the definition employed in this study with its emphasis on integration into American society, were assumed to have sought more opportunities to speak English inside and outside of the workplace. However, similar to the explanation for the lack of relationship between age of arrival and baseline measures of English, because students were placed into specific courses according to their proficiency in English, there is less variability in all of the baseline measures, perhaps attenuating the relationships between these measures and integrative orientation.

It was likewise surprising that there were not significant relationships between baseline integrative orientation and attendance and graduation. It was hypothesized that students with a greater desire to integrate into American society would exert more effort by attending more classes than those students who did not show the same orientation. Previous research (e.g., Gardner & Lambert, 1972) would suggest that integrative orientation is significantly related to the amount of effort that a student will put forth to learn language. It is possible that among this population of learners, the integrative orientation is not differentiating. Students could have a greater desire to integrate into American society, but not necessarily see attending classes as a way to accomplish this goal.

Hypothesis 3

Correlational Analysis

As a preliminary analysis of the relationship between instrumental orientation related to the workplace and instrumental orientation as related to the family, we ran simple correlations. In each of the three courses, the correlations were significant ($p < .001$). This analysis provided evidence that instead of the two originally predicted factors, we may only be dealing with one. These correlations can be found in Table 20.

Additionally, when the six items were combined into a single scale, their reliabilities were higher than either of the two three-item scales (Shift Basics: $\alpha = .551$; Shift Conversation: $\alpha = .710$; Shift Writing: $\alpha = .680$).

Exploratory Factor Analyses

We conducted an exploratory factor analysis, using the 6 items expected to assess instrumental orientation. As predicted, a scree-plot of eigenvalues revealed two dominant factors in the Shift Basics and Shift Writing courses, explaining 51% and 59% of the common variance among responses, respectively. In the Shift Conversation course, the results of the factor analysis were counter to predictions. The scree-plot of eigenvalues revealed only one dominant factor, explaining 43% of the common variance among responses. None of the other factors exceeded an eigenvalue of one.

Structural Equation Models

Although the exploratory factor analysis confirmed a two-factor model in two of the three courses, the validity of this model was not confirmed through Confirmatory Factor Analysis (CFA) via LISREL 8 (Joreskog & Sorbom, 1996). To assess goodness of fit, we examined the model's associated χ^2 value as well as five measures of fit: goodness of fit index (GFI), root mean square error of approximation (RMSEA), standardized root mean residual (SRMR), comparative fit index (CFI), and nonnormed fit index (NNFI). According to Kline (2005), to show good model fit, the GFI should be above .90, the RMSEA should be between .05 and .08, the SRMR should be less than .10, and the CFI and NNFI should exceed .90. The results for each model are presented in Table 21. In our analysis, these statistics showed that the two-factor model did not fit the data significantly better than a one-factor model in any of the courses. The GFI, SRMR and CFI all showed good model fit, though the RMSEA and NNFI indicated room for

model improvement across all three courses. To explore both one- and two-factor options, the analysis below considers instrumental orientation separately in the two predicted factors, as well as using a single factor combining instrumental orientation for the workplace and the family.

Hypothesis 3A - Students' mean instrumental orientation will be higher than their mean integrative orientation.

In each course, three paired-samples t-tests were conducted to analyze the relationships between integrative and instrumental orientations at baseline. These tests compared the integrative orientation against instrumental orientation with a focus on the workplace, instrumental orientation with a focus on the family, and a combined factor. Across the three courses, each t-test indicated significantly higher means for the instrumental variable ($ps < .001$). These results are shown in Table 22.

Hypothesis 3B - Instrumental orientation will be positively related to attendance.

In order to determine if there was a positive relationship between both types of baseline instrumental orientation and course attendance, we ran simple correlations. These correlations did not indicate a significant positive relationship between the measures of instrumental orientation (with respect to workplace, family or the combined factor) and attendance in any of the three courses ($ps > .213$). These correlations are included in Tables 23-25.

Hypothesis 3C - Students with higher levels of instrumental orientation will be more likely to graduate than those with lower levels.

In order to determine if baseline instrumental orientation impacted probability of graduation, we performed three logistic regression models. One of these models used baseline

instrumental orientation with regard to the workplace as the predictor variable; the second used baseline instrumental orientation with regard to family; the third used the combined factor. All models used graduation (Yes or No) as the dependent variable. None of these models yielded significant results in any of the courses ($ps > .259$ for the workplace; $ps > .515$ for family; $ps > .357$ for combined). The results of these analyses are presented in Tables 26-28.

Hypothesis 3 - Discussion

In this study, an instrumental orientation to learn English was defined through achievement of workplace goals, advancement of one's family, and these combined. The hypothesis that students would express higher levels of instrumental orientation than integrative orientation was confirmed; instrumental orientation as it related to the workplace, as it related to the family, and the combined factor had higher mean values than the integrative orientation.

This finding was not surprising as immigrants have generally moved to the United States in order to find work and to improve the lives of their families. In the service industry, to communicate with customers and to excel at one's job, an employee generally needs to be able to speak English. Students who cannot speak English well are often passed over for promotions, meaning that they make less money than employees who can speak English, even if the former are equally hard-working and knowledgeable about their jobs. Therefore, there is incentive for employees to learn English as it will allow them to advance in the workplace.

Literature documents the plights of many immigrant mothers and fathers who are in the United States, working to send money back to their families, or who have brought their families to the United States in search of a better life (e.g., Nazario, 2006). Furthermore, anecdotal evidence has suggested that many immigrant families want to be able to help their children by

assisting with homework, talking with teachers, and communicating with doctors. Therefore, it was unsurprising that students showed higher levels of instrumental orientation as it related to family than to the integrative orientation. Many immigrants express instrumental reasons for learning English, as it will help them attain the goals they laid out when they moved to the United States.

Perhaps more surprising than the lack of relationship between the integrative orientation and attendance is the lack of relationship between the instrumental orientation—workplace, family and combined—and attendance. It was hypothesized that students expressing higher levels of instrumental orientation would be more likely to attend class, as this would give them a better opportunity to achieve the goals of workplace success and familial advancement. A possible explanation for this seeming non-relationship is the lack of variability on the scales of instrumental orientation. The distributions on these scales were highly negatively skewed, indicating that many students rated the instrumental orientations as highly as the scale would allow, thus considerably decreasing the chances of demonstrating a significant relationship. Because nearly all students show high levels of these orientations, these scales may not serve as effective differentiators between students with high attendance and students with low attendance.

In an attempt to alleviate this issue, logarithmic transformations were performed on the two scales of instrumental orientation and the combined factor; these transformed scales were then correlated with attendance. Unfortunately, these analyses (in Tables 29-31) also produced non-significant findings ($ps > .139$).

Hypothesis 4

Hypothesis 4A - Ideal language self will be positively related to attendance.

Correlations between ideal language self at baseline and student attendance were not significant in the Shift Basics or Shift Conversation courses ($ps > .901$). However, there was a significant correlation between baseline ideal language self and student attendance in the Shift Writing course, $r(123) = .184, p = .041$. These correlations can be found in Table 32.

Hypothesis 4B - Students with higher levels of ideal language self will be more likely to graduate than those with lower levels.

In order to determine if baseline ideal language self impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and baseline ideal language self as the predictor variable. The models did not yield significant results in any of the courses ($ps > .224$). The results of this analysis are presented in Table 33.

Hypothesis 4 - Discussion

It was hypothesized that students who, in an ideal world, saw themselves as speakers of English, would be more likely to attend language classes, in order to bring their actual language selves more in line with their ideal language selves. This hypothesis received support in the Shift Writing course, but did not receive support in the other courses.

The mean level of ideal language self was not significantly different across the three courses; however, it is possible that students in more advanced classes perceived the discrepancy between actual and ideal language selves as less than beginning and intermediate students. In other words, these more advanced students may see the ideal language self as a more achievable goal than those in the beginner and intermediate courses, making it more motivating. Although it is possible that students in beginning and intermediate levels of

language learning could be motivated by the ideal language self, the discrepancy between the actual and the ideal may be too great for them to act on it.

Hypothesis 5

Correlational Analyses

As a preliminary analysis of the relationship between linguistic self-confidence and linguistic anxiety, we ran simple correlations. In none of the three courses was the relationship significant ($ps > .353$). It was surprising not to observe a significant relationship between these factors; it was assumed that they would show a negative relationship, although the relationship may not have been strong. This analysis provided evidence that these factors were indeed distinct. These correlations can be found in Table 34.

Alternatively, when the three items were combined into a single scale, their reliabilities were lower than the two-item scales of linguistic self-confidence (Shift Basics: $\alpha = .199$; Shift Conversation: $\alpha = .140$; Shift Writing: $\alpha = .122$).

Exploratory Factor Analysis

We also conducted an exploratory factor analysis, using the two items expected to assess linguistic self-confidence and the one item expected to assess linguistic anxiety. A screeplot of eigenvalues revealed two dominant factors in the Shift Conversation and Shift Writing courses, explaining 75% and 70% of the common variance among responses, respectively. Consistent with predictions, the items loaded on their expected factors for the Shift Conversation course. Counter to predictions in the Shift Writing course, the one item that loaded on the second factor was one of the linguistic self-confidence items.

In the Shift Basics course, the results of the factor analysis were counter to predictions. The scree-plot of eigenvalues revealed only one dominant factor, explaining 41% of the common variance among responses. None of the other factors exceeded an eigenvalue of one.

Structural Equation Modeling

The exploratory factor analysis was not consistent across courses, and the validity of a two-factor model was not confirmed through CFA via LISREL. In all three courses, saturated models were returned for both one- and two-factor solutions. Because the differing analyses showed somewhat ambiguous results, the analysis below considers linguistic self-confidence and linguistic anxiety as two separate factors (Hypotheses 5 & 6), and is followed by an analysis and discussion of a combined factor.

Hypothesis 5A - Baseline linguistic self-confidence will be positively related to baseline proficiency in English.

To examine whether students' baseline linguistic self-confidence was positively related to the measures of language proficiency and usage, we performed several simple correlations between baseline linguistic self-confidence and each of the baseline measures of language proficiency. These correlations are presented in Table 35.

In the Shift Basics course, there were significant positive correlations between baseline linguistic self-confidence and the standardized measure ($r(186) = .159, p = .03$), as well as with the three self-report measures of proficiency ($r(244) = .219, p = .001$), frequency ($r(244) = .250, p < .001$), and workplace behaviors as measured by the Can Do list ($r(244) = .267, p < .001$). Furthermore, there were significant positive correlations between baseline linguistic self-confidence and supervisor ratings of student frequency ($r(119) = .313, p = .001$) and confidence

($r(119) = .254, p = .005$) to speak English, and workplace behaviors as measured by the Can Do list ($r(114) = .199, p = .033$).

In the Shift Conversation course, there were significant positive relationships between baseline linguistic self-confidence and the standardized measure of English proficiency ($r(269) = .167, p = .006$), as well as with the self-report measures of proficiency ($r(319) = .197, p < .001$), frequency ($r(319) = .283, p < .001$), and workplace behaviors as assessed by the Can Do list ($r(319) = .286, p < .001$). None of the correlations between baseline linguistic self-confidence and supervisor ratings were significant in the Shift Conversation course ($ps > .178$).

In the Shift Writing course, there was a significant positive correlation between baseline linguistic self-confidence and self-reported frequency in English ($r(124) = .294, p = .001$); however, the relationships between baseline linguistic self-confidence and the self-report measures of proficiency and workplace writing do not approach significance ($ps > .246$). Furthermore, the correlation between linguistic self-confidence and baseline supervisor ratings of confidence to speak English was significant ($r(22) = -.471, p = .027$); however, this correlation was in the direction opposite predictions. Higher levels of linguistic self-confidence were associated with lower levels of supervisor-rated confidence to speak English.

Hypothesis 5B – Linguistic self-confidence will be positively related to language learning outcomes.

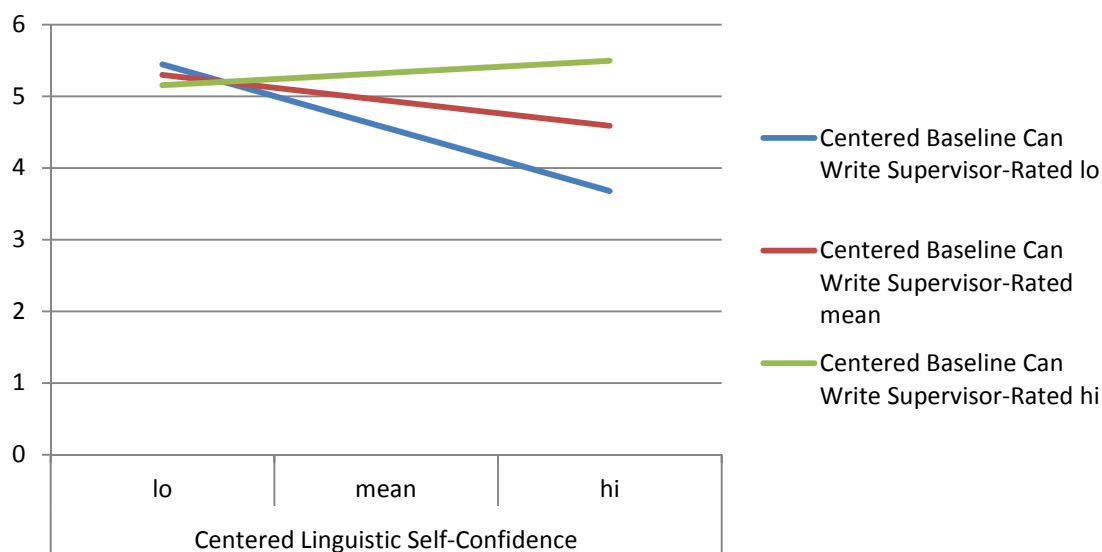
In order to test the relationship between linguistic self-confidence and student gains in English across the duration of the course, regression models were generated for each of the outcome measures. The results of these tests are shown in Tables 36-45. For each variable, the predictors of post-program score were centered baseline score on the measure being tested, centered linguistic self-confidence and the centered interaction term between these variables.

For each measure, baseline score served as a significant predictor of post-program score. These tests revealed three significant findings, two in the Shift Conversation class. For frequency of speaking English, baseline linguistic self-confidence served as an additional predictor variable after controlling for baseline score in English, $\beta = .156$, $t(170) = 2.657$, $p = .009$. Also, for workplace behaviors as assessed by the Can Do list, baseline linguistic self-confidence served as an additional predictor variable, $\beta = .172$, $t(176) = 2.421$, $p = .017$.

In the Shift Writing course, the interaction term was significant between the supervisor's rating of ability to complete written workplace tasks and linguistic self-confidence, $\beta = .711$, $t(5) = 5.136$, $p = .036$. This suggests that baseline supervisor rating of writing ability moderated the relationship between baseline linguistic self-confidence and post-program score on the supervisor rating of ability to complete written workplace tasks. The slope of the line regressing post program supervisor ratings of writing ability on linguistic self-confidence at one standard deviation above the mean baseline supervisor ratings was .348, suggesting that participants with higher supervisor-rated proficiency at baseline were more likely to improve when they had greater linguistic self-confidence. The slope at one standard deviation below the mean was -1.80. This suggests that participants with lower supervisor-rated proficiency at baseline were less likely to improve when they had lower levels of linguistic self-confidence.

This relationship can be seen in Figure 3.

Figure 3. Post-program score on the supervisor-rated measure of workplace behaviors (Can Write) as a function of baseline score on the measure and students' linguistic self-confidence in the Shift Writing course.



Hypothesis 5C – Students' linguistic self-confidence will increase from baseline to the end of the program.

To test the hypothesis that linguistic self-confidence increases from baseline to the end of the program, paired-samples t-tests were run for each course. Across the three courses, none of the t-tests indicated significantly higher means for the post-program variable ($ps > .501$). These results are shown in Table 46.

Hypothesis 5D - Students with higher levels of linguistic self-confidence at baseline will show higher levels of attendance.

Correlations between linguistic self-confidence at baseline and student attendance were not significant in Shift Conversation or Shift Writing ($ps > .516$); however, there was a significant correlation between baseline linguistic self-confidence and student attendance in the Shift Basics course, $r(243) = .155, p = .016$. These correlations can be found in Table 47.

Hypothesis 5E - Students with higher levels of linguistic self-confidence at baseline will be more likely to graduate.

In order to determine if baseline linguistic self-confidence impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and baseline linguistic self-confidence as the predictor variable. The models did not yield significant results in any of the courses. There were non-significant trends in the Shift Basics and Shift Writing courses, $b = .601$, $p = .066$, $Exp(B) = 1.823$; $b = .723$, $p = .071$, $Exp(B) = 2.06$. These relationships suggest that a one-point increase on the linguistic self-confidence scale would increase the likelihood of graduation 1.823 times in the Shift Basics course and 2.06 times in the Shift Writing course. The results of this analysis are presented in Table 48.

Hypothesis 5 – Discussion

The hypotheses regarding the relationship between baseline linguistic self-confidence and the baseline measures of English ability received strong support. Participants with higher levels of baseline linguistic self-confidence generally reported higher baseline levels of English proficiency and frequency. The relationship between baseline linguistic self-confidence and self-reported frequency was significant in all three classes. When combining course data, baseline linguistic self-confidence was significantly related to the standardized measure of proficiency, self-reported proficiency, self- and supervisor-reported frequency, supervisor-reported confidence, and self- and supervisor-reported ability on spoken tasks in the workplace.

One possible explanation for these findings is that students with higher levels of baseline linguistic self-confidence have likely used English more often before attending the class due to their confidence; as a result, they may truly possess higher levels of English ability. A second explanation may suggest that students experiencing higher levels of linguistic self-

confidence will report that they possess higher levels of proficiency and frequency in usage of English. In reality, these students may possess equal levels of English proficiency, but their confidence has led them to inflated beliefs about their own abilities. In the Shift Conversation course, the relationship between linguistic self-confidence and self-ratings is stronger than that between linguistic self-confidence and supervisor ratings. This could suggest that students in the Shift Conversation class are inflating their reported abilities, based on their level of confidence. However, in the Shift Basics course, student and supervisor ratings are showing similar relationships with linguistic self-confidence. This possibly suggests that at lower levels of confidence, students are more realistic about their own abilities.

Given that linguistic self-confidence had been demonstrated to be an important predictor of learning outcomes in previous studies (Clement, et al., 1994), it was expected that students who entered English Under the Arches courses with higher levels of linguistic self-confidence would show greater increases in proficiency and frequency to speak English and in their workplace behaviors. This hypothesis received support in the Shift Conversation course, but not in the Shift Basics or Shift Writing courses. One possible explanation for this finding is the length of the course. At eight and twelve weeks, respectively, Shift Basics and Shift Writing are markedly shorter than the 22-week Shift Conversation course. It is possible that in the shorter courses, linguistic self-confidence was not able to add significantly to the learning gains that students experienced. Because the learning process is gradual, the impact of linguistic self-confidence may take a longer course to be fully realized.

The hypothesis that linguistic self-confidence would increase from baseline to the end of the program was not supported in any of the courses. One possible explanation for these results was the high levels of self-reported linguistic self-confidence at baseline. Participants did

not have much room to increase their linguistic self-confidence at the post-program measurement. Another possibility is that students initially overrated their linguistic self-confidence and reevaluated it over the duration of the course. Research on self-judgment (Kruger & Dunning, 1999) suggests that novices are more likely to overrate their abilities on tasks from humor to logic. In the study, once these individuals were shown how low their level of proficiency truly was, only then were they able to revise it to a more realistic level. This phenomenon of being unskilled and unaware could be a possible explanation for the current results. Students may be entering the course believing that they are highly confident to speak English. After being exposed to language training, they may realize that their language skills were not as high as they originally thought and thus revise their judgments of linguistic self-confidence to be more in line with their actual level.

The hypothesis that linguistic self-confidence would be positively related to attendance received support in the Shift Basics course, but not in the Shift Conversation or Shift Writing courses. One possible explanation for this finding deals again with course length. Although linguistic self-confidence may not impact learning outcomes in a shorter course, it is possible that linguistic self-confidence may be more strongly related to attendance in the early stages of a course, rather than throughout its progression. Students with higher levels of linguistic self-confidence may attend more class sessions in the beginning because they are not deterred by fear; in fact, these students may truly enjoy performing behaviors in which they are confident. However, as a course continues, linguistic self-confidence may no longer differentiate between learners in the amount of classes that they attend. Linguistic self-confidence may not be able to influence perseverance in the same way that it influences initial excitement. This may explain why there was a stronger relationship between linguistic self-confidence and attendance in the

shortest course, but not in the longer courses. This is not to say that linguistic self-confidence does not play a role in influencing learning throughout the duration of the course. For those students that do attend, linguistic self-confidence may enhance learning, as confident students are more likely to use English in class.

Hypothesis 6

Hypothesis 6A - Baseline linguistic anxiety will be inversely related to baseline proficiency in English.

To examine whether students' baseline linguistic anxiety was inversely related to their baseline proficiency and frequency in using English, we performed several simple correlations between baseline linguistic anxiety and each of the baseline measures of language proficiency. These correlations are presented in Table 49. Additionally, we compared the correlation coefficients with quadratic terms to investigate the possibility that the relationship between baseline anxiety and baseline proficiency in English was curvilinear. Through this analysis as well as a visual examination of the scatterplots, there was no significant evidence to suggest a curvilinear relationship over a linear relationship. As a result, the analysis proceeded using the correlation coefficients.

In the Shift Basics course, there were significant inverse correlations between baseline linguistic anxiety and the three self-report measures of proficiency ($r(241) = -.215, p = .001$), frequency ($r(241) = -.159, p = .013$), and workplace behaviors as measured by the Can Do list ($r(241) = -.218, p = .001$). Additionally, there was a non-significant trend between baseline linguistic anxiety and the standardized measure of English proficiency ($r(184) = -.138, p = .062$). Furthermore, there were significant inverse correlations between baseline linguistic anxiety and supervisor ratings of student frequency ($r(118) = -.203, p = .028$) and confidence ($r(118) = -.240,$

$p = .009$), and their workplace behaviors as measured by the Can Do list ($r(113) = -.236, p = .012$).

In the Shift Conversation course, there were significant inverse relationships between baseline linguistic anxiety and the standardized measure of English proficiency ($r(265) = -.237, p < .001$), as well as with the self-report measures of proficiency ($r(315) = -.182, p = .001$), frequency ($r(315) = -.154, p = .006$), and workplace behaviors as assessed by the Can Do list ($r(315) = -.191, p = .001$). None of the correlations between baseline linguistic anxiety and supervisor ratings were significant in the Shift Conversation course ($ps > .463$).

In the Shift Writing course, there was a significant inverse correlation between baseline linguistic anxiety and self-reported proficiency in English ($r(124) = -.321, p < .001$); however, the relationships between baseline linguistic anxiety and the self-report measures of frequency and ability to complete written tasks in the workplace did not approach significance. None of the correlations between baseline linguistic anxiety and supervisor ratings were significant in the Shift Writing course ($ps > .234$).

Hypothesis 6B – Students' linguistic anxiety will decrease from baseline to the end of the program.

To test the hypothesis that linguistic anxiety decreases from baseline to the end of the program, paired-samples t-tests were run for each course. Across the three courses, each of the t-tests indicated significantly lower means for the post-program variable ($ps < .015$). These results are shown in Table 50.

Hypothesis 6C – Changes in linguistic anxiety will be inversely related to increases in English proficiency.

In order to determine the relationship between linguistic anxiety and improvements in English proficiency, regression models were generated for each of the outcome measures. The results of these tests are shown in Tables 51-60. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered change in linguistic anxiety and the centered interaction term between these variables. For each outcome measure, baseline score served as a significant predictor.

These tests revealed one additional significant finding, in the Shift Writing class. For proficiency in speaking English, change in linguistic anxiety served as an additional predictor variable after controlling for baseline score, $\beta = -0.155$, $t(74) = -2.041$, $p = .045$. None of the interaction terms across the three courses were significant ($ps > .07$).

Hypothesis 6D - Students with higher levels of linguistic anxiety at baseline will show lower levels of attendance.

In order to determine if there was an inverse relationship between baseline linguistic anxiety and course attendance, we ran simple correlations. These correlations did not indicate a significant inverse relationship in any of the three courses ($ps > .168$). These correlations can be found in Table 61.

Hypothesis 6E - Students with higher levels of linguistic anxiety at baseline will be less likely to graduate.

In order to determine if baseline linguistic anxiety impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and

baseline linguistic anxiety as the predictor variable. The models did not yield significant results in any of the courses ($ps > .326$). These results are presented in Table 62.

Hypothesis 6 - Discussion

The hypotheses regarding the relationship between baseline linguistic anxiety and the baseline measures of proficiency and frequency in speaking English received strong support. Participants with higher levels of baseline anxiety generally reported lower proficiency and frequency in using English. The relationship between baseline linguistic anxiety and self-reported proficiency was significant in all three classes, even though students were placed in each class based on their proficiency in English, which had been shown previously to attenuate this relationship somewhat.

A similar explanation to linguistic self-confidence is possible for the findings. Students with higher levels of baseline anxiety have likely used English less frequently before attending the class due to this anxiety and, thus, truly possess lower levels of proficiency and frequency in using English. A second explanation, again similar to linguistic self-confidence, may suggest that students experiencing higher levels of anxiety self-report lower levels of proficiency and frequency in usage of English. These students may believe that they possess lower levels of English than they actually do given their anxiety. In reality, these students may possess equal levels of English proficiency, but their anxiety does not allow them to recognize this. The findings from the Shift Conversation course tend to support the former explanation, whereas the findings from the Shift Basics course tend to support the latter. It is possible that students in beginning level classes are more likely to report lower levels of skill in English, given their anxiety, whereas those in intermediate level courses actually do possess less skill, which is a byproduct of their anxiety.

There was generally little support for the hypotheses regarding improvements in English corresponding to decreases in linguistic anxiety. In the Shift Writing course, the improvement in self-reported proficiency in English was related to change in linguistic anxiety. It is not immediately clear why only this finding was significant.

The hypothesis that participants with higher levels of baseline anxiety would attend fewer classes than those with lower levels of baseline anxiety was not supported. Although this finding is counter to the hypothesis, it is potentially positive. If students who have higher levels of baseline linguistic anxiety continue to attend classes at the same rate as students with lower levels of linguistic anxiety and graduate at the same rate, the results would suggest that they would experience decreases in linguistic anxiety and show similar improvements in English to those who entered the course with lower baseline anxiety.

Supplemental Analysis – Combining Hypotheses 5 & 6

Because linguistic self-confidence and linguistic anxiety are closely related theoretically and because the results around their factor structure remained somewhat ambiguous, it seemed prudent to analyze them as one factor, in addition to analyzing them separately. The analysis below replicates the analyses performed separately on each factor, using a single scale. In order to create this scale, the scoring on the item measuring linguistic anxiety was reversed. As a result, higher scores indicate greater linguistic self-confidence and lesser linguistic anxiety. The results and discussion below will use the term *combined measure* to avoid confusion.

Hypothesis A – The combined measure of baseline linguistic self-confidence and anxiety will be positively related to baseline proficiency in English.

In the Shift Basics course, there were significant positive correlations between the combined measure and the standardized measure of English proficiency, $r(186) = .195, p = .008$,

as well as with the three self-report measures of proficiency ($r(244) = .303, p < .001$), frequency ($r(244) = .300, p < .001$), and workplace behaviors as measured by the Can Do list ($r(244) = .344, p < .001$). Furthermore, there are significant positive correlations between the combined measure and supervisor ratings of student frequency ($r(119) = .340, p < .001$) and confidence ($r(119) = .324, p < .001$) to speak English, and workplace behaviors as measured by the Can Do list ($r(114) = .289, p = .002$).

In the Shift Conversation course, there were significant positive relationships between the combined measure of linguistic self-confidence and anxiety and the standardized measure of English proficiency ($r(269) = .278, p < .001$), as well as with the self-report measures of proficiency ($r(319) = .259, p < .001$), frequency ($r(319) = .297, p < .001$), and workplace behaviors as assessed by the Can Do list ($r(319) = .336, p < .001$). None of the correlations between the combined measure and supervisor ratings were significant in the Shift Conversation course ($ps > .192$).

In the Shift Writing course, there was a significant positive correlation between the combined measure and self-reported proficiency in English ($r(124) = .309, p < .001$); the relationship between the combined measure and the measure of written workplace tasks approaches significance ($r(122) = .161, p = .076$). None of the correlations between the combined measure and supervisor ratings were significant in the Shift Writing course ($ps > .704$). The correlations for this hypothesis are included in Table 63.

Hypothesis B - Students' ratings on the combined measure of linguistic self-confidence and anxiety will increase from baseline to the end of the program.

To test the hypothesis that the combined measure increases from baseline to the end of the program, paired-samples t-tests were run for each course. In Shift Conversation and Shift

Writing, the t-tests indicated significantly higher means for the post-program variable; however, in Shift Basics, the results were not significant ($p = .102$). These results are shown in Table 64.

Hypothesis C – Baseline scores on the combined measure of linguistic self-confidence and anxiety will be positively related to increase in English proficiency.

In order to determine the relationship between the combined measure and improvements in English proficiency, regression models were generated for each of the outcome measures. The results of these tests are shown in Tables 65-74. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered score on the combined measure and the centered interaction term between these variables. For each outcome measure, baseline score served as a significant predictor.

These tests revealed several significant findings in the Shift Conversation course. The baseline score on the combined measure served as a predictor variable after controlling for baseline score on the standardized measure of proficiency, $\beta = .141$, $t(152) = 2.341$, $p = .021$, the self-report measure of proficiency, $\beta = .162$, $t(171) = 2.361$, $p = .019$, the self-report measure of frequency, $\beta = .16$, $t(170) = 2.724$, $p = .007$, and the self-report measure of workplace behaviors, $\beta = .229$, $t(176) = 3.336$, $p = .001$. Also, in the Shift Basics course, there was one significant finding; baseline score on the combined measure was a significant predictor of supervisor ratings of proficiency, $\beta = .404$, $t(9) = 2.692$, $p = .01$.

Hypothesis D - Students with higher scores on the combined measure of linguistic self-confidence and anxiety at baseline will show higher levels of attendance.

In order to determine if there was a positive relationship between the combined measure and course attendance, we ran simple correlations. These correlations did not indicate

a significant positive relationship in any of the three courses ($ps > .155$). These correlations are included in Table 75.

Hypothesis E - Students with higher scores on the combined measure of linguistic self-confidence and anxiety will be more likely to graduate.

In order to determine if linguistic self-confidence and anxiety impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and the combined measure as the predictor variable. The models did not yield significant results in any of the courses ($ps > .36$). This analysis is included in Table 76.

Supplemental - Discussion

The relationships between the combined measure of linguistic self-confidence and anxiety showed consistently stronger relationships with measures at baseline than did linguistic self-confidence or linguistic anxiety alone. These results suggest either that students with higher levels of linguistic self-confidence truly possess higher levels of English proficiency and usage, or that more confident students are more likely to rate themselves higher, given their beliefs in their own abilities in English.

The results of the analyses which examined the differences between baseline and end of program outcome measures suggest that linguistic self-confidence and anxiety impact learning in the Shift Conversation class. The combined measure acts as a significant predictor of change on the standardized measure and all self-report measures. Students who entered the Shift Conversation course with more confidence were more likely to experience proficiency gains as well as perceive that they have experienced these gains. Interestingly, the results are not significant in the Shift Basics and Shift Writing courses. As we have seen previously, it is possible that this is related to course length.

The hypotheses that participants with higher scores on the combined measure at baseline would attend more classes and graduate more often than those with lower scores were not supported in any course. Taken with the previous findings regarding language gains, it is possible that students who were more linguistically self-confident participated more often and at higher levels than those who were less linguistically self-confident. If this were the case, these students could show greater increases in their language skills, even if they did not attend more class sessions.

Hypothesis 7

Hypothesis 7A - Integrative orientation will be positively correlated with motivational intensity.

In order to determine if there was a positive relationship between baseline integrative orientation and motivational intensity, we ran simple correlations. These correlations indicated significant positive relationships in both the Shift Basics and Shift Writing courses, $r(244) = .135$, $p = .035$, and $r(124) = .178$, $p = .048$, respectively. There was not a significant correlation between baseline integrative orientation and motivational intensity in the Shift Conversation course ($p = .628$). These correlations are included in Table 77.

Hypothesis 7B - Instrumental orientation will be positively correlated with motivational intensity.

We ran simple correlations to determine if relationships existed between baseline motivational intensity and the instrumental orientation related to the workplace, the instrumental orientation related to the family, and the combined measure of instrumental orientation. These correlations are presented in Table 78-80. The correlation between baseline instrumental orientation as related to the workplace and motivational intensity was significant in both the Shift Basics and Shift Conversation courses, $r(244) = .210$, $p = .001$, and $r(319) = .272$, $p < .001$, respectively, and approached significance in the Shift Writing course, $r(124) = .154$, $p =$

.088. The correlation between baseline instrumental orientation as related to family and motivational intensity was significant in all three courses, $r(229) = .439, p < .001$, $r(236) = .507, p < .001$, and $r(124) = .390, p < .001$, respectively. The correlation between baseline combined instrumental orientation and motivational intensity was significant in all three courses, $r(244) = .375, p < .001$, $r(319) = .364, p < .001$, and $r(124) = .302, p = .001$, respectively.

Hypothesis 7C - Baseline motivational intensity will be positively correlated with attendance.

In order to determine if there was a positive relationship between baseline motivational intensity and course attendance, we ran simple correlations. These correlations did not indicate a significant positive relationship in any of the three courses ($ps > .238$). These correlations are included in Table 81.

Hypothesis 7D - Students with higher levels of motivational intensity at baseline will be more likely to graduate.

In order to determine if baseline motivational intensity impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and baseline motivational intensity as the predictor variable. The models did not yield significant results in any of the courses, but approached significance in the Shift Basics class, $b = .898, p = .054, \text{Exp}(B) = 2.454$. This suggests that a one-point increase on the motivational intensity scale would increase the likelihood of graduation 2.454 times. These analyses are included in Table 82.

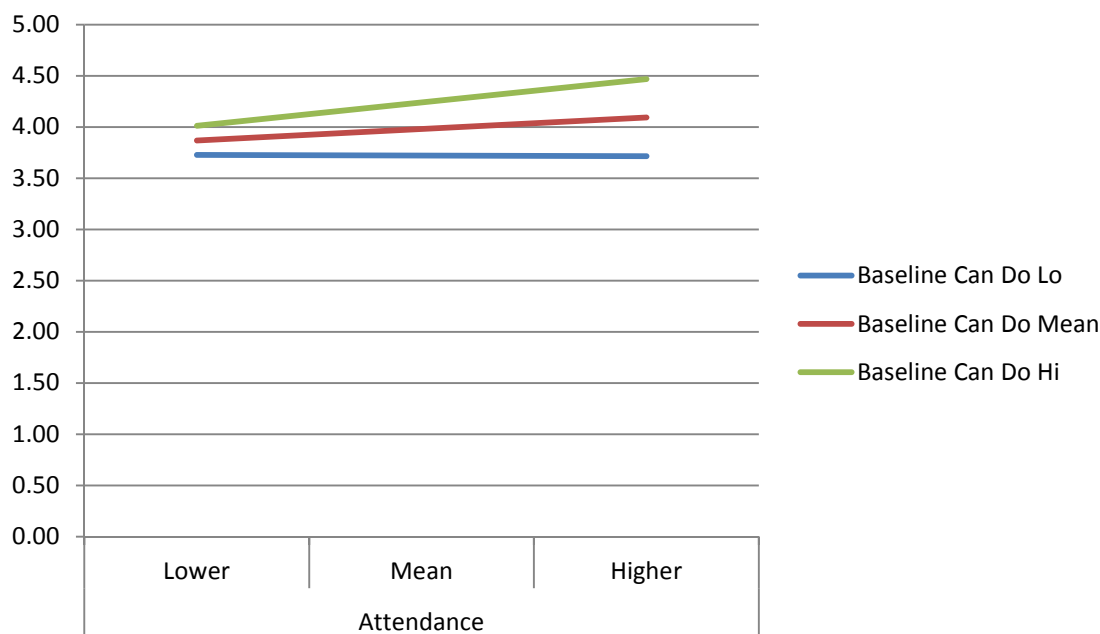
Hypothesis 7E – Student attendance will be positively correlated with language learning outcomes.

In order to test the relationship between course attendance and student gains in English across the duration of the course, regression models were generated for each of the outcome

measures. The results of these tests are shown in Tables 83-92. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered attendance and the centered interaction term between these variables. For each outcome measure, baseline score served as a significant predictor.

These tests revealed several significant findings in the Shift Conversation course. On the standardized measure of proficiency in English, attendance served as an additional predictor variable after controlling for baseline score, $\beta = -.14$, $t(152) = -2.446$, $p = .016$; however, this result was in the opposite direction as predicted. On the measure of spoken workplace behaviors, attendance served as an additional predictor, $\beta = .132$, $t(174) = 1.978$, $p = .05$. In this model, the interaction term was also significant, $\beta = .149$, $t(174) = 2.152$, $p = .033$. This suggests that baseline score on the measure of spoken workplace behaviors moderated the relationship between attendance and post-program score. The slope of the line regressing post-program score on the measure of spoken workplace behaviors on attendance at one standard deviation above the mean baseline score on the standardized measure was .012, suggesting that participants with higher scores on the standardized measure at baseline were more likely to improve when they attended more classes. The slope at one standard deviation below the mean was 0.0. This suggests that participants with lower baseline scores on the measure of workplace behaviors showed no difference in post-program scores as a function of their attendance. This relationship can be seen in Figure 4.

Figure 4. Post-program score on the self-report measure of workplace behaviors (Can Do) as a function of baseline score on the measure and students' course attendance in the Shift Conversation course.



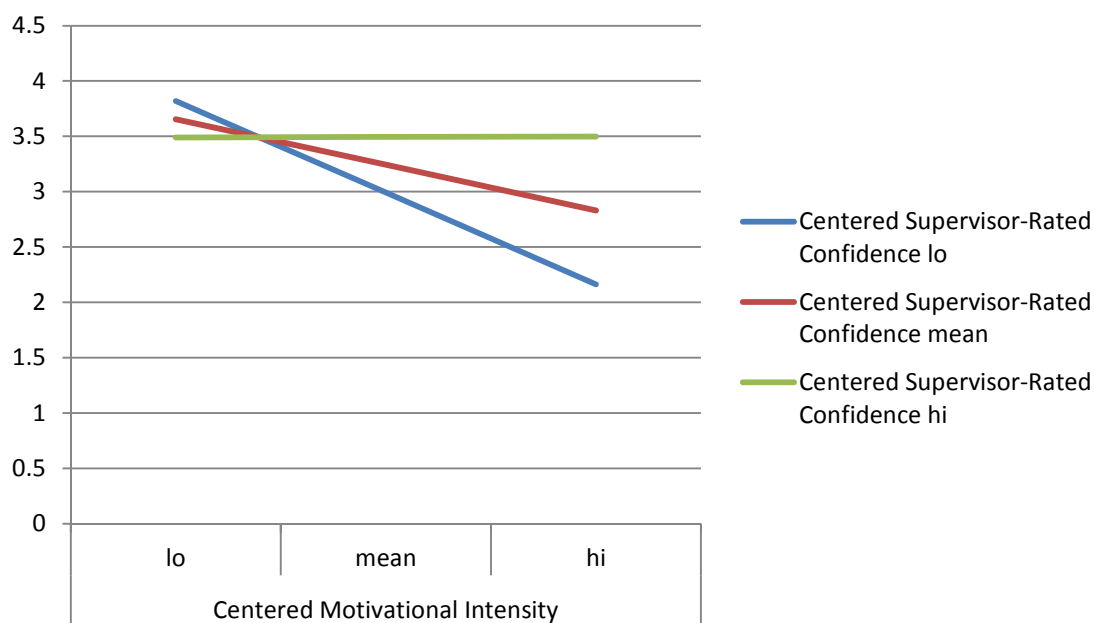
Hypothesis 7F - Motivational intensity will be positively correlated with language learning outcomes.

In order to test the relationship between baseline motivational intensity and student gains in English across the duration of the course, regression models were generated for each of the outcome measures. The results of these tests are shown in Table 93-101. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered baseline motivational intensity and the centered interaction term between these variables. For each outcome measure, baseline score was a significant predictor.

In the Shift Basics course, there were two significant findings related to improvement in speaking confidence. Primarily, baseline motivational intensity served as an additional predictor of change in supervisor ratings of student confidence, $\beta = -.406$, $t(47) = -2.391$, $p = .021$; contrary

to expectations, this finding suggests that higher levels of motivational intensity are associated with decreases in confidence. Additionally, the interaction term between baseline motivational intensity and supervisor rating of confidence was significant, $\beta = .381$, $t(47) = 2.19$, $p = .034$. This suggests that baseline supervisor-rated confidence moderated the relationship between baseline motivational intensity and post-program supervisor-rated confidence. The slope of the line regressing post-program supervisor rating of confidence on baseline motivational intensity at one standard deviation above the mean baseline supervisor rating of confidence was .015, suggesting that participants with higher supervisor ratings of confidence at baseline showed almost no difference in post-program supervisor ratings of confidence as a function of their baseline motivational intensity. The slope at one standard deviation below the mean was -2.287. This suggests that participants with lower baseline supervisor ratings of confidence at baseline were less likely to improve when they had higher levels of baseline motivational intensity. This relationship can be seen in Figure 5.

Figure 5. Post-program score on the supervisor-report measure of confidence as a function of baseline score on the measure and baseline motivational intensity in the Shift Basics course.



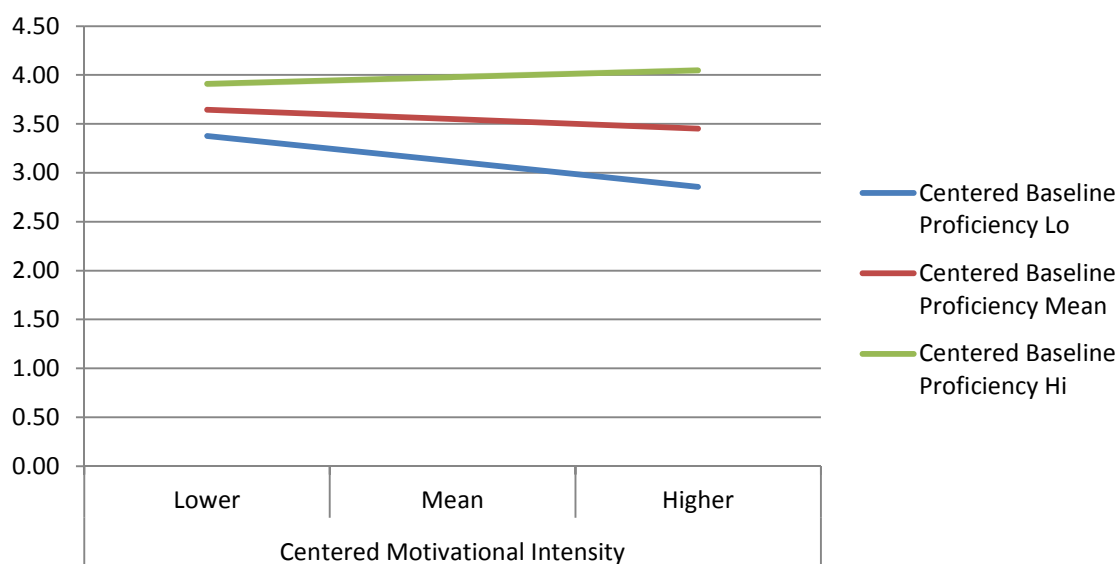
In the Shift Conversation course, these tests revealed that baseline motivational intensity acted as an additional significant predictor of post-program scores on self-report measures of proficiency and frequency of using English, and on spoken workplace behaviors, $\beta = .155$, $t(171) = 2.272$, $p = .024$; $\beta = .146$, $t(170) = 2.615$, $p = .01$; $\beta = .188$, $t(176) = 2.407$, $p = .017$, respectively.

In the Shift Writing course, for the self-reported measure of proficiency in English, the interaction term was significant, $\beta = .159$, $t(83) = 2.097$, $p = .039$. This suggests that baseline self-ratings of proficiency moderated the relationship between baseline motivational intensity and post-program self-reported proficiency. The slope of the line regressing post-program self-rating of proficiency on baseline motivational intensity at one standard deviation above the mean baseline self-rating of proficiency was .195, suggesting that participants with higher baseline self-ratings of proficiency were more likely to improve when they had higher levels of

baseline motivational intensity. The slope at one standard deviation below the mean was $-.745$.

This suggests that participants with lower baseline self-ratings of proficiency were less likely to improve when they had higher levels of baseline motivational intensity. This relationship can be seen in Figure 6.

Figure 6. Post-program score on the self-report measure of proficiency as a function of baseline score on the measure and baseline motivational intensity in the Shift Writing course.



We also sought to determine the relationship between end of program motivational intensity and student gains in English across the duration of the course. To do this, regression models were generated for each of the outcome measures. The results of these tests are shown in Table 102-111. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered end of program motivational intensity and the centered interaction term between these variables. For each outcome measure, baseline score served as a significant predictor.

There were several significant findings across all three courses. End of program motivational intensity served as a significant predictor of proficiency (Shift Basics: $\beta = .217$,

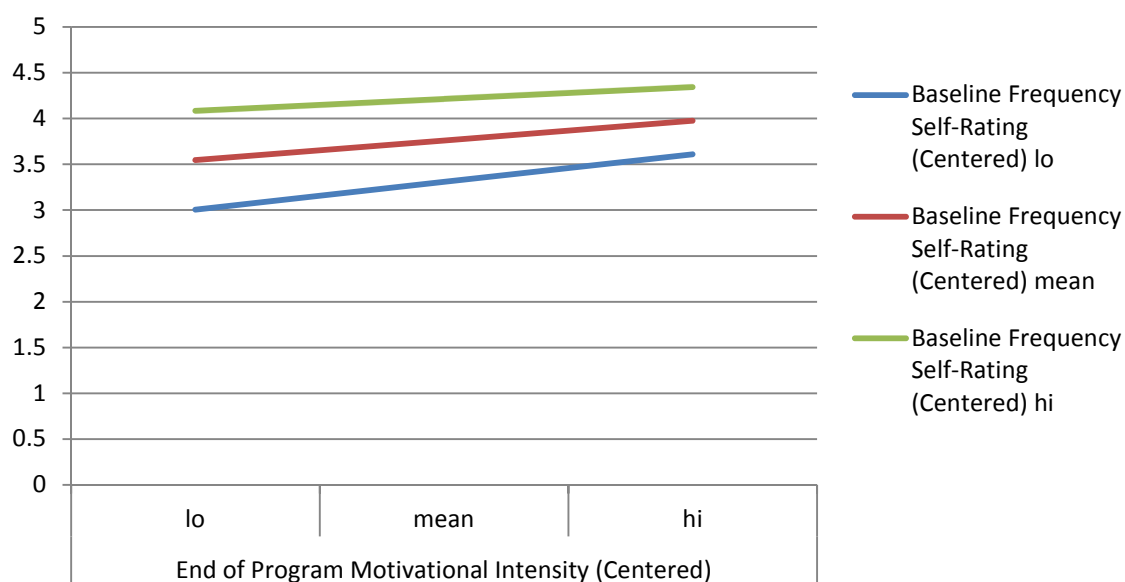
$t(147) = 3.043, p = .003$; Shift Conversation: $\beta = .269, t(171) = 4.147, p < .001$; Shift Writing: $\beta = .251, t(76) = 2.454, p = .017$) and frequency (Shift Basics: $\beta = .325, t(147) = 5.764, p < .001$; Shift Conversation: $\beta = .263, t(171) = 4.57, p < .001$; Shift Writing: $\beta = .259, t(76) = 2.476, p = .016$). In both the Shift Basics and Shift Conversation courses, end of program motivational intensity was a significant predictor of ability to perform spoken workplace tasks, $\beta = .32, t(149) = 5.634, p < .001$, and $\beta = .376, t(176) = 5.87, p < .001$, respectively.

Two other significant main effects were seen. In the Shift Basics course, end of program motivational intensity was a significant predictor of supervisor ratings of student confidence, $\beta = .331, t(48) = 2.39, p < .021$. In the Shift Writing course, end of program motivational intensity was a significant predictor of supervisor-rated proficiency, $\beta = .86, t(5) = 4.428, p < .047$.

Additionally, there were several significant interactions with end of program motivational intensity. In the Shift Conversation course, the interaction between end of program motivational intensity and self-rating of frequency was significant, $\beta = -.117, t(170) = -2.125, p = .035$. This suggests that baseline self-ratings of frequency moderated the relationship between end of program motivational intensity and post-program self-reported frequency. The slope of the line regressing post-program self-ratings of frequency on end of program motivational intensity at one standard deviation above the mean baseline self-rating of frequency was .188, suggesting that participants with higher baseline self-ratings of frequency were more likely to improve when they had higher levels of end of program motivational intensity. The slope at one standard deviation below the mean was .443. This suggests that participants with lower baseline self-ratings of frequency were also more likely to improve when they had higher levels of end of program motivational intensity. The effects of increased end of program motivational intensity were more pronounced in students with lower baseline self-

ratings compared to those with higher baseline self-ratings of frequency. This relationship can be seen in Figure 7.

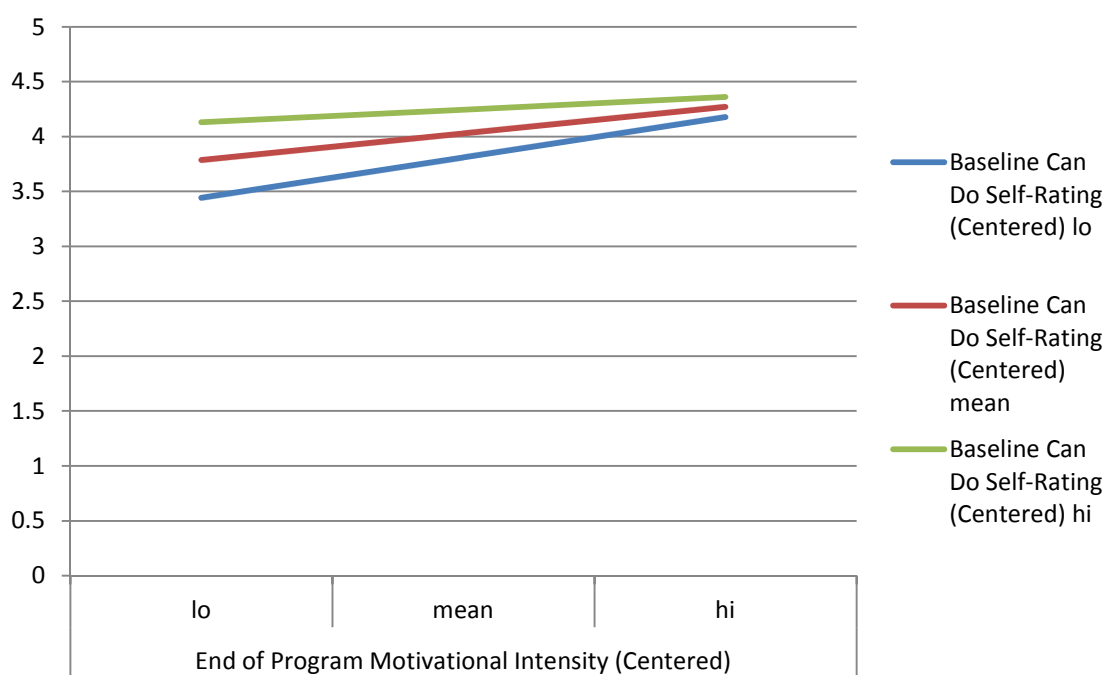
Figure 7. Post-program score on the self-report rating of frequency as a function of baseline score on the measure and end of program motivational intensity in the Shift Conversation course.



Also in the Shift Conversation course, the interaction between end of program motivational intensity and self-ratings of ability to complete spoken workplace behaviors was significant, $\beta = -.207$, $t(176) = -3.357$, $p = .001$. This suggests that baseline self-ratings of spoken workplace behaviors moderated the relationship between end of program motivational intensity and post-program self-reported ability to complete spoken workplace behaviors. The slope of the line regressing post-program self-ratings of spoken workplace behaviors on end of program motivational intensity at one standard deviation above the mean baseline self-ratings of spoken workplace behaviors was .169, suggesting that participants with higher baseline self-ratings of ability to complete spoken workplace behaviors were more likely to improve when they had higher levels of end of program motivational intensity. The slope at one standard

deviation below the mean was .537. This suggests that participants with lower baseline self-ratings of spoken workplace behaviors were also more likely to improve when they had higher levels of end of program motivational intensity. The effects of increased end of program motivational intensity were more pronounced in students with lower baseline self-ratings compared to those with higher baseline self-ratings of ability to complete workplace behaviors. This relationship can be seen in Figure 8.

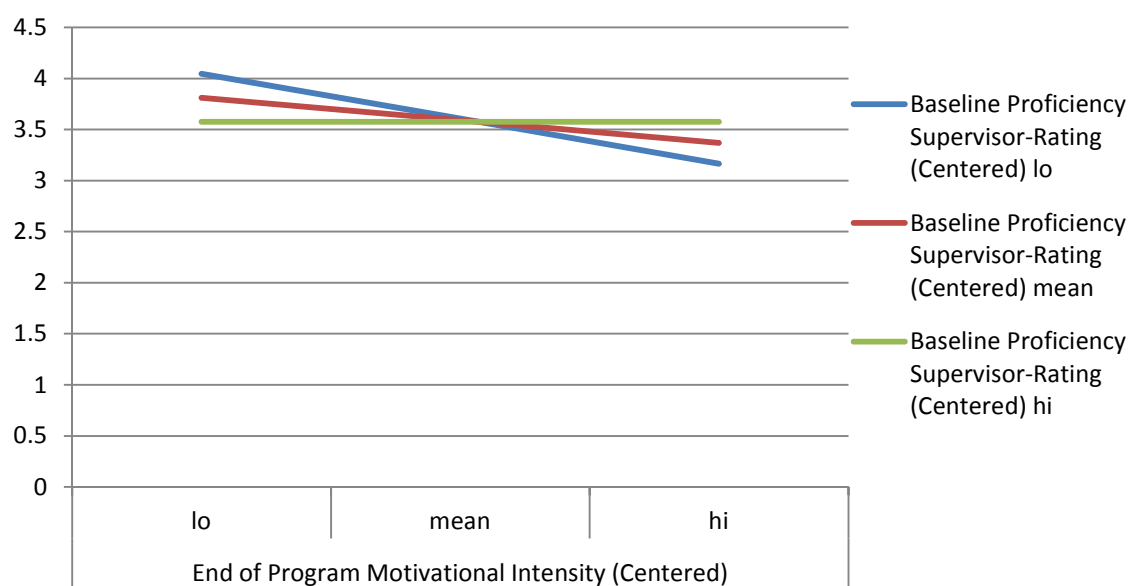
Figure 8. Post-program score on the self-report measure of ability to complete spoken workplace tasks as a function of baseline score on the measure and end of program motivational intensity in the Shift Conversation course.



Additionally, in the Shift Conversation course, the interaction between end of program motivational intensity and supervisor rating of proficiency was significant, $\beta = 1.004$, $t(9) = 2.668$, $p = .037$. This suggests that baseline supervisor-ratings of proficiency moderated the relationship between end of program motivational intensity and post-program supervisor-

reported proficiency. The slope of the line regressing post-program supervisor-ratings of proficiency on end of program motivational intensity at one standard deviation above the mean baseline supervisor-rating of proficiency was 0.00, suggesting that at higher baseline supervisor ratings of proficiency, there was no effect of end of program motivational intensity on post-program supervisor ratings of proficiency. The slope at one standard deviation below the mean was -.644. This suggests that participants with lower baseline supervisor-ratings of proficiency were less likely to improve when they had higher levels of end of program motivational intensity. This relationship can be seen in Figure 9.

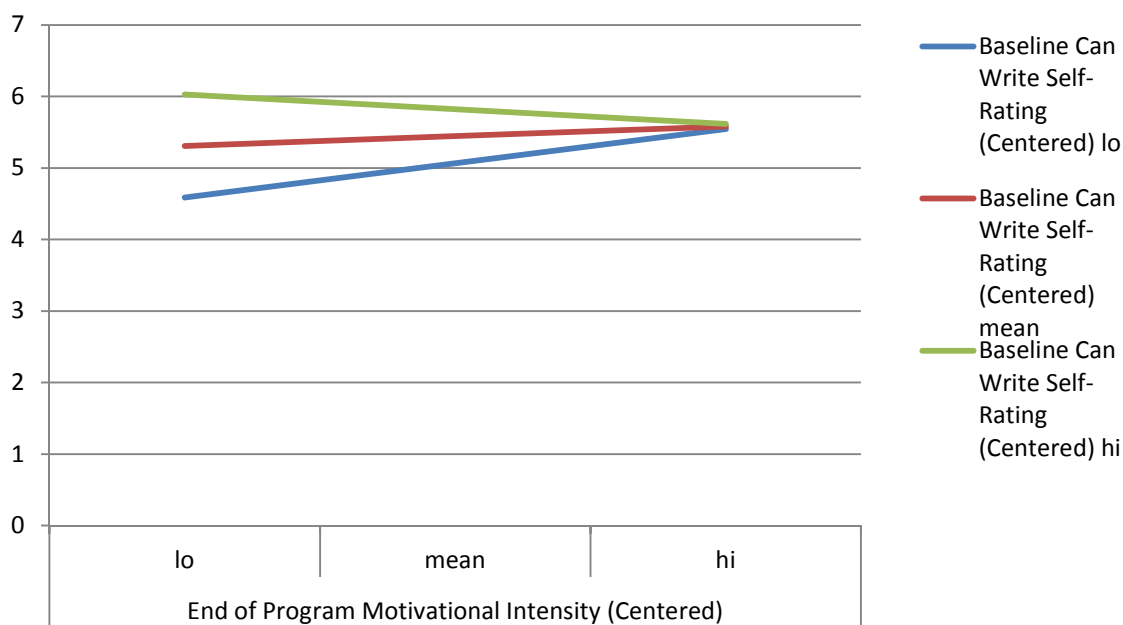
Figure 9. Post-program score on the supervisor rating of proficiency as a function of baseline score on the measure and end of program motivational intensity in the Shift Conversation course.



Finally, in the Shift Writing course, there were two significant interactions between end of program motivational intensity and language learning variables. Primarily, the interaction between end of program motivational intensity and self-rating of ability to complete written workplace tasks was significant, $\beta = -.49$, $t(74) = -5.004$, $p < .001$. This suggests that baseline

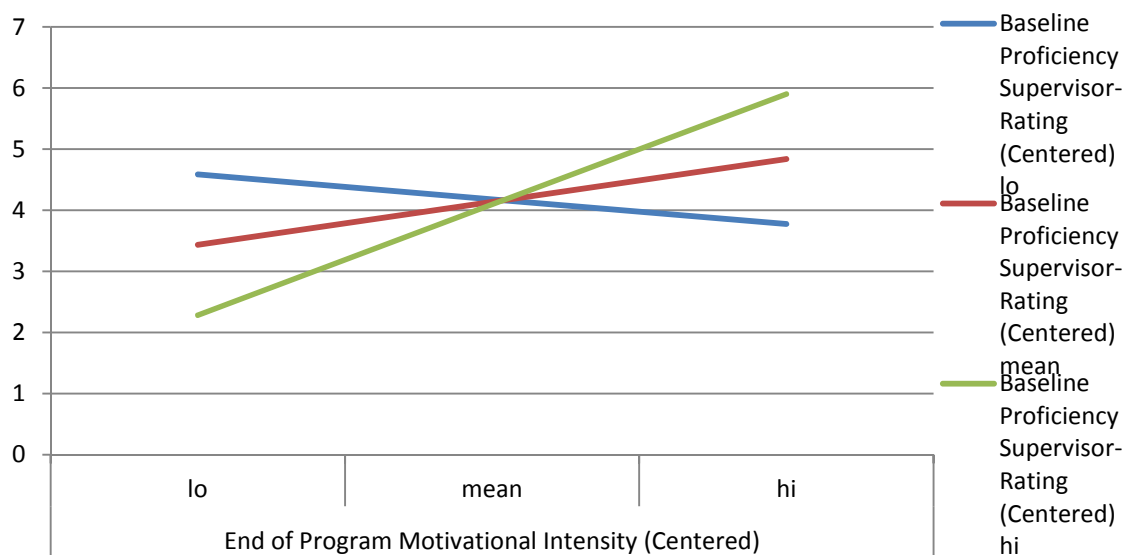
self-ratings of written workplace behaviors moderated the relationship between end of program motivational intensity and post-program self-reported ability to complete written workplace behaviors. The slope of the line regressing post-program self-ratings of written workplace behaviors on end of program motivational intensity at one standard deviation above the mean baseline self-rating of written workplace behaviors was $-.323$, suggesting that participants with higher baseline self-ratings of ability to complete written workplace behaviors were less likely to improve when they had higher levels of end of program motivational intensity. The slope at one standard deviation below the mean was $.753$. This suggests that participants with lower baseline self-ratings of written workplace behaviors were more likely to improve when they had higher levels of end of program motivational intensity. This relationship can be seen in Figure 10.

Figure 10. Post-program score on the self-report measure of ability to complete written workplace tasks as a function of baseline score on the measure and end of program motivational intensity in the Shift Writing course.



The second significant interaction in the Shift Writing course was between end of program motivational intensity and supervisor-ratings of proficiency, $\beta = 1.559$, $t(5) = 6.039$, $p = .026$. This suggests that baseline supervisor-ratings of proficiency moderated the relationship between end of program motivational intensity and post-program supervisor-reported proficiency. The slope of the line regressing post-program supervisor-rated proficiency on end of program motivational intensity at one standard deviation above the mean baseline supervisor-rated proficiency was 2.836, suggesting that participants with higher baseline supervisor ratings of proficiency were more likely to improve when they had higher levels of end of program motivational intensity. The slope at one standard deviation below the mean was $-.634$. This suggests that participants with lower baseline supervisor-rated proficiency were less likely to improve when they had higher levels of end of program motivational intensity. This relationship can be seen in Figure 11.

Figure 11. Post-program score on the supervisor-report measure of proficiency as a function of baseline score on the measure and end of program motivational intensity in the Shift Writing course.



Hypothesis 7 – Discussion

The hypotheses regarding the relationships between the motivational orientations (integrative and instrumental) and motivational intensity generally received support. The correlations were strongest and most consistent with baseline instrumental orientation related to family. This orientation received a higher rating than any other orientation at baseline; it is conceivable that it would show the greatest relationship with a measure of effort exertion. A possible alternative explanation results from the nature of the motivation questionnaire. Because all of items are self-report, there may be some tendency toward affirmation bias. It is possible that students tended to rank all items similarly, resulting in higher correlations than actually exist; however, if this were the case, we would expect to see similarly high correlations among all of the variables. Because this is not the case, these relationships are more credible.

The hypothesis that baseline motivational intensity and course attendance would be positively related was not supported in any course. This is quite surprising as it was assumed that motivational intensity and attendance would be tapping a similar construct of exerted effort. It is possible that even though students who began the course with higher levels of motivational intensity were not more likely to attend class than those with lower levels of baseline motivational intensity, they exerted more effort while in class. An instructor-report measure of each student's effort exerted in the class would be valuable in furthering this analysis.

The hypotheses that higher attendance level would be related to greater changes in proficiency and frequency in using English were largely unsupported. Very surprisingly, in the Shift Conversation course, attendance was found to have a negative relationship with change in score on the standardized measure. That is, higher attendance was related to less improvement

on the measure. Because this finding was in the opposite direction as predicted, it may simply be an artifact of the data. There is no plausible explanation for greater attendance being related to lesser proficiency gains.

Attendance did have a positive effect on spoken workplace behaviors in the Shift Conversation course. As has been noted previously, it is possible that greater improvements are more likely to be seen in the Shift Conversation course due to its length, compared to the other courses. It may take a longer class for some of the effects to be recognized. Additionally, the greater variability in the attendance numbers in Shift Conversation may allow for the enhanced ability to uncover effects, compared to the other courses.

The hypotheses that higher levels of baseline motivational intensity would be related to greater change in the outcome variables received support in the Shift Conversation course, but not in the Shift Basics or Shift Writing courses. Students in the Shift Conversation course with higher levels of baseline motivational intensity demonstrated greater improvement in self-reported proficiency and frequency in English usage, and in their workplace behaviors, than did students with lower levels of baseline motivational intensity. The same findings were observed in the relationships between end of program motivational intensity and language learning outcomes. Additionally, unlike with baseline motivational intensity, there were significant findings in the Shift Basics and Shift Writing courses between end of program motivational intensity and language learning outcomes. Both of these pieces of evidence suggest that there is more to motivational intensity than simple affirmation bias. It also suggests that motivational intensity may be measuring a different construct than attendance. In the current study, baseline motivational intensity was not related to course attendance, but it is possible that students who reported higher levels of motivational intensity did truly exert more effort when

they were in class. Course attendance may have been affected by situational forces other than students' motivation and out of their control (e.g., scheduling and busyness of the restaurant at class time). The effort they exerted in class is much more likely to be driven by their true motivation than these outside influences. It is not out of the realm of possibility that certain students would get more out of the course, even with limited attendance, than other students who were always present in body, but not in mind. This could be more likely to occur in a longer course, as the absolute number of class hours increases. In this way, if students were truly motivated, even those who attend less often could show greater language gains.

Hypothesis 8

Correlational Analysis

As a preliminary analysis of the relationship between perceived social milieu and perceived social support, we ran simple correlations. In each of the three courses, the correlations were significant ($p < .001$). This analysis provided evidence that these two predicted factors may in reality be reflecting a single underlying factor. These correlations can be found in Table 112.

Alternatively, when the six items were combined into a single scale, their reliabilities were lower than the three-item scales (Shift Basics: $\alpha = .447$; Shift Conversation: $\alpha = .440$; Shift Writing: $\alpha = .349$). This may reflect separate factors.

Exploratory Factor Analyses

We conducted an exploratory factor analysis, using the 6 items expected to assess social milieu and social support. As predicted, a scree-plot of eigenvalues revealed two dominant factors in the Shift Conversation, explaining 52% of the common variance among responses. Counter to expectations, the results of the factor analysis revealed three dominant factors in the

Shift Basics and Shift Writing courses, explaining 66% and 63% of the common variance among responses, respectively. None of the other factors exceeded an eigenvalue of one.

Structural Equation Models

The two-factor model suggested by exploratory factor analysis for the Shift Conversation course was confirmed through CFA. In both the Shift Basics and Shift Writing courses, exploratory factor analysis revealed a three-factor model; the validity of these models was not confirmed through CFA. Rather, in these courses, one-factor models fit the data sufficiently well. The GFI and SRMR showed good model fit, though the CFI, RMSEA, and NNFI indicated significant room for model improvement across all three courses. The results for each model are presented in Table 113.

In order to include the most comprehensive examination of the factors related to one's social network, the analysis below considers social milieu and social support according to the two predicted factors, as well as a single factor for all three courses.

Hypothesis 8A - Students with higher levels of perceived social milieu and social support will show higher levels of attendance.

In order to determine if there was a positive relationship between baseline social milieu and course attendance, we ran simple correlations. These correlations did not indicate a significant positive relationship in any of the three courses ($ps > .109$). These results are in Table 114.

Correlations between perceived social support at baseline and student attendance were significant in the Shift Basics and Shift Writing courses, $r(243) = .135$, $p = .035$, and $r(124) = .198$, $p = .027$, respectively. There was no significant correlation between baseline perceived social

support and student attendance in the Shift Conversation course ($p = .305$). These results are in Table 115.

The factor combining social milieu and social support showed a significant relationship with attendance in the Shift Writing course, $r(124) = .218, p = .015$. The results were not significant in the other courses for attendance ($ps > .105$). These results are in Table 116.

Hypothesis 8B - Students with higher levels of perceived social milieu and social support will be more likely to graduate.

In order to determine if baseline social milieu impacted probability of graduation, we performed logistic regression, using graduation (Yes or No) as the dependent variable, and baseline social milieu as the predictor variable. The models did not yield significant results in any of the courses ($ps > .251$). These results are presented in Table 117.

We performed the same analysis using perceived social support as the predictor. The models yielded significant results in the Shift Basics and Shift Writing courses, $b = .659, p = .03, Exp(B) = 1.932$, and $b = .773, p = .01, Exp(B) = 2.166$, respectively. This suggests that a one-point increase on the social support scale would increase the likelihood of graduation 1.932 times in the Shift Basics course and 2.166 times in the Shift Writing course. The model did not yield significant results in the Shift Conversation course ($p = .518$). These results are presented in Table 118.

When social milieu and perceived social support were combined, the factor significantly predicted graduation, $b = 1.197, p = .011, Exp(B) = 3.311$, in the Shift Writing course. The results were not significant in the other courses ($ps > .07$). The results of these analyses are in Table 119.

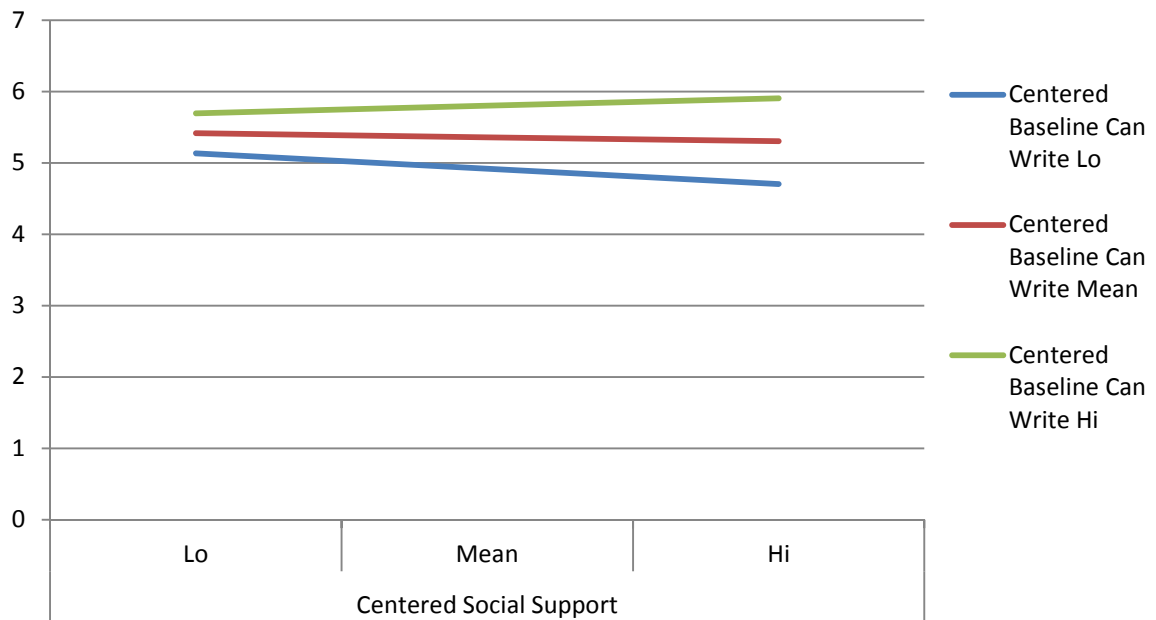
Hypothesis 8C - Students who perceive a higher degree of support in their social network will demonstrate greater language learning outcomes than students who do not.

Regression models were generated for each of the outcome measures. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered social support and the centered interaction term between these variables. These tests were replicated using the combined social network variable in the place of perceived social support. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered social network and the centered interaction term between these variables. For each outcome measure on both of these analyses, baseline score served as a significant predictor. The results of these tests are shown in Tables 120-129 for social support and Tables 130-139 for combined social network.

In the Shift Writing course, for the workplace behaviors measure of writing, the interaction term was significant, $\beta = .206$, $t(81) = 2.098$, $p = .039$. This suggests that baseline self-ratings of written workplace behaviors moderated the relationship between baseline perceived social support and post-program self-reported ability to complete written workplace behaviors. The slope of the line regressing post-program self-reported written workplace behaviors on baseline perceived social support at one standard deviation above the mean baseline self-reported written workplace behaviors was .144, suggesting that participants with higher baseline self-ratings of ability to complete written workplace behaviors were more likely to improve when they had higher levels of perceived social support at baseline. The slope at one standard deviation below the mean was -.292. This suggests that participants with lower baseline self-ratings of written workplace behaviors were less likely to improve when they had higher levels of baseline perceived social support. This relationship can be seen in Figure 12.

When the factors were combined, the same interaction was found between this factor and baseline workplace writing behaviors, $\beta = .193$, $t(81) = 2.014$, $p = .047$.

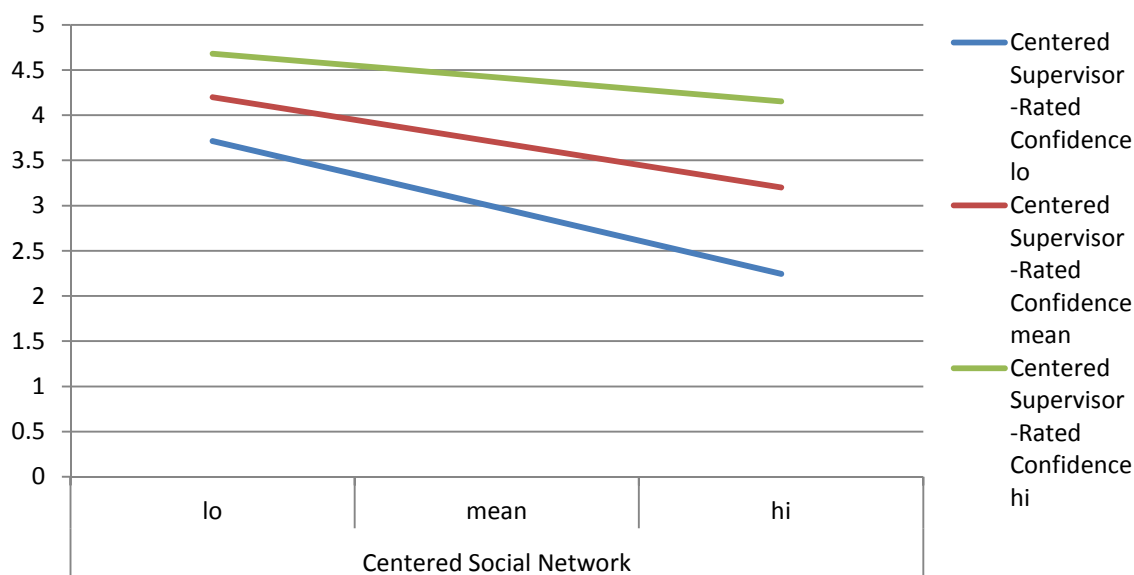
Figure 12. Post-program score on the self-report measure of workplace writing behaviors (Can Write) as a function of baseline score on the measure and perceived social support in the Shift Writing course.



Also in the Shift Writing course, perceived social support at baseline was a significant predictor of change in supervisor ratings of student confidence, $\beta = -.621$, $t(5) = -5.32$, $p = .034$. However, this finding was not in the predicted direction. It suggests that higher levels of perceived social support were associated with lower levels of change in supervisor ratings of student confidence. When the factors were combined, this finding was replicated, $\beta = -.587$, $t(5) = -45.06$, $p < .001$. Additionally, the interaction term was significant, $\beta = .313$, $t(5) = 30.08$, $p = .001$. This suggests that baseline supervisor-ratings of student confidence moderated the relationship between baseline perceived social support and post-program supervisor ratings of confidence. The slope of the line regressing post-program supervisor ratings of student

confidence on perceived social support at baseline at one standard deviation above the mean baseline supervisor-rated confidence was $-.581$, suggesting that participants with higher baseline supervisor-rated student confidence were less likely to improve when they had higher levels of perceived social support at baseline. The slope at one standard deviation below the mean was -1.169 . This suggests that participants with lower baseline supervisor-rated confidence were also less likely to improve when they had higher levels of perceived social support at baseline. The effects of increased baseline social support were more pronounced in students with lower baseline supervisor-rated confidence compared to those with higher baseline supervisor-rated confidence. This relationship can be seen in Figure 13.

Figure 13. Post-program score on the supervisor-report measure of confidence as a function of baseline score on the measure and social network scores in the Shift Writing course.



Hypothesis 8 – Discussion

The hypotheses that social milieu impacts course attendance and graduation was not supported. The results suggest that participants who perceived that their social networks

assigned higher levels of importance to learning English did not attend class more often than those who perceived that their social networks assigned lower levels of importance to learning English. One possible explanation for this finding is a low degree of variability in the ratings of social milieu. Social milieu received the highest mean ratings of any social or motivational scale, with relatively small standard deviations. This lack of variability made it very difficult to find relationships with outcome variables. Another possible explanation is that the attitudes of a student's social network simply do not translate into behaviors or behavior change for students. Students may agree with their social network that learning English is important, but they still may not attend more classes as a result.

The hypotheses that perceived social support would be related to course attendance and graduation received support in the Shift Basics and Shift Writing courses, but did not receive support in the Shift Conversation course. One possible explanation for this difference deals with the length of the course. Perceived social support may play a stronger role in the early weeks of a course. Students who have families or supervisors who encourage them to attend class and help them to complete assignments may be more likely to persevere at the beginning of the class. Without this support early on in the course, a student may succumb to anxiety or discouragement. On the other hand, in a longer course, social support may be of lesser importance. Although students are likely to be impacted by social support at the beginning of a course in a similar way to those in shorter courses, those who have persevered through twelve weeks are much more likely to continue in their attendance. At this point in the course, these students have likely overcome some linguistic anxiety and achieved some language gains. These victories and the prospects of additional gains may help them more than the support of those

around them. This is not to say that social support would be detrimental in a longer course; it may merely become less related to course attendance.

The hypothesis that higher perceived social support would be related to learning outcomes did not receive support in any course. Only in the Shift Writing course was there an interaction between perceived social support and written workplace tasks. When students had low baseline scores on this measure, those with lesser perceived social support improved more than those with greater perceived social support. This finding is difficult to reconcile. It is possible that these students with lower baseline writing scores and lesser perceived social support improved more because they had to rely on their own efforts, rather than others' assistance. These students may have exerted additional effort in the course because they knew that they were unable to rely on others. Additionally, it is possible that these students had something to prove to their social networks, demonstrating that they could improve by their own efforts. These explanations are purely speculative; it is equally possible that the finding is simply an artifact of the data.

When social milieu and social support were combined, the only significant effects remained in the Shift Writing course. The findings which had been observed with perceived social support were replicated. Additionally, a second interaction was observed, though because this was the result of supervisor-report data, it should be interpreted with caution. Overall, it seems that social milieu, social support, and their combination do not strongly impact language learning outcomes.

Hypothesis 9

Hypothesis 9A – Group cohesion will be positively correlated with motivational intensity.

In order to determine if there was a positive relationship between group cohesion and motivational intensity, we ran simple correlations. These correlations indicated significant positive correlations in the Shift Basics class between group cohesion—which was measured only at the end of the program—and baseline motivational intensity ($r(145) = .259, p = .002$) and post-program motivational intensity ($r(149) = .292, p < .001$). There were also significant positive correlations between group cohesion and motivational intensity at the end of the program in Shift Conversation ($r(163) = .301, p < .001$) and Shift Writing ($r(75) = .474, p < .001$). In these courses, there were not significant positive correlations between group cohesion and baseline motivational intensity. These correlations are presented in Tables 140 and 141.

Hypothesis 9B – Motivational intensity will increase more in cohesive groups, compared to non-cohesive groups.

In order to determine if group cohesion was related to the change in motivational intensity over the duration of a course, regression models were generated for each course. The results of these tests are shown in Table 142. The predictor variables were centered baseline motivational intensity, centered group cohesion, and the centered interaction term between and among these variables. The outcome measure was post-program motivational intensity. In each course, group cohesion served as a significant predictor (Shift Basics: $\beta = .319, t(143) = 3.619, p < .001$; Shift Conversation: $\beta = .305, t(162) = 3.975, p < .001$; Shift Writing: $\beta = .351, t(74) = 2.82, p = .006$). Baseline motivational intensity and the interaction were not significant in any course.

Hypothesis 9C – Students with high motivational intensity, who are in highly cohesive groups will show the greatest language learning achievement.

In order to assess the impact of motivational intensity and group cohesion on language learning achievement, regression models were generated for each of the outcome measures. The results of these tests are shown in Tables 143-151. In each case, the predictors of post-program score were centered baseline score on the particular measure, centered baseline motivational intensity, centered group cohesion and the centered interaction terms between these variables. For each outcome measure, baseline score served as a significant predictor.

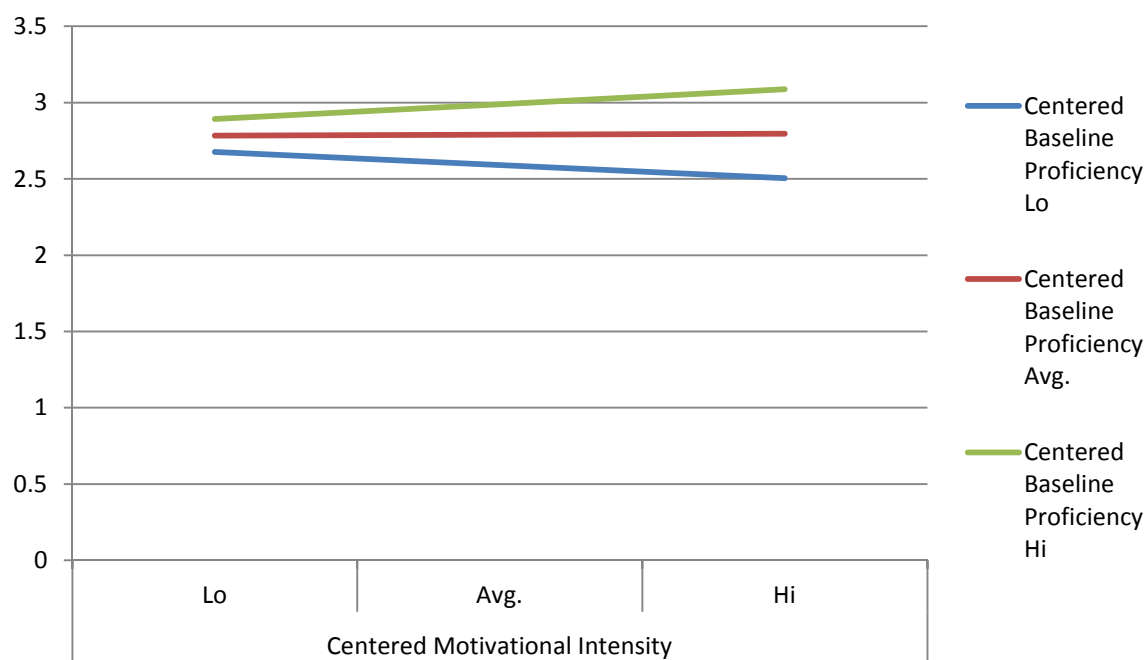
There were several significant main effects for group cohesion on learning outcomes across the Shift Basics and Shift Conversation courses. In the Shift Basics course, group cohesion was found to be a significant predictor of improvement in frequency of speaking English ($\beta = .148$, $t(142) = 2.327$, $p = .021$). In both the Shift Basics and Shift Conversation courses, group cohesion was a significant predictor of improvement in spoken workplace behaviors ($\beta = .156$, $t(142) = 2.567$, $p = .011$, and $\beta = .143$, $t(162) = 2.092$, $p = .038$, respectively).

Additionally, there were several main effects for baseline motivational intensity in the Shift Conversation course. Baseline motivational intensity was found to be a significant predictor of increase in frequency of speaking English, $\beta = .214$, $t(159) = 3.332$, $p = .001$. Baseline motivational intensity was also found to be a significant predictor of spoken workplace behaviors, $\beta = .237$, $t(162) = 2.584$, $p = .011$. These results are consistent with previous findings in the current study.

There was one significant interaction in the Shift Basics course. The interaction term between baseline proficiency and baseline motivational intensity was found to be significant after accounting for group cohesion, $\beta = .156$, $t(140) = 2.298$, $p = .023$. This suggests that

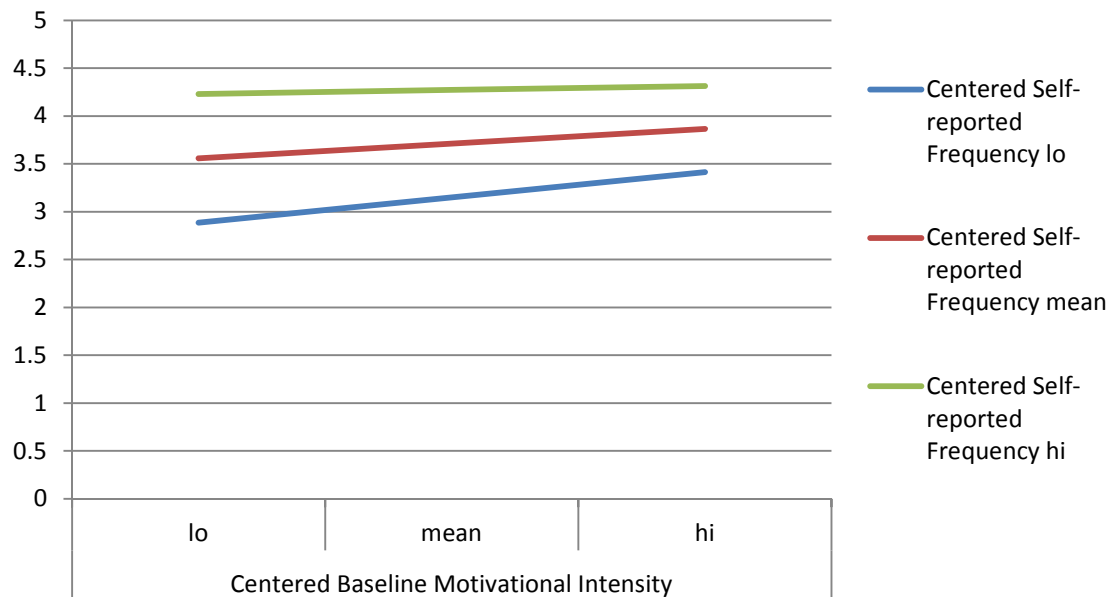
baseline self-reported proficiency moderated the relationship between baseline motivational intensity and post-program self-ratings of proficiency after controlling for group cohesion. The slope of the line regressing post-program self-ratings of proficiency on baseline motivational intensity at one standard deviation above the mean on baseline self-rated proficiency was .154, suggesting that participants with higher baseline self-rated proficiency were more likely to improve when they had higher levels of baseline motivational intensity. The slope at one standard deviation below the mean was -.133. This suggests that participants with lower baseline supervisor-rated confidence were less likely to improve when they had higher levels of baseline motivational intensity. This relationship can be seen in Figure 14.

Figure 14. Post-program score on the self-report proficiency as a function of baseline score on the measure and baseline motivational intensity, controlling for Group Cohesion in the Shift Basics course.



In the Shift Conversation course, there were also two significant interactions, both with respect to frequency in English usage. One interaction was between baseline frequency and baseline motivational intensity, $\beta = -.127$, $t(159) = -2.075$, $p = .04$. This suggests that baseline self-reported frequency moderated the relationship between baseline motivational intensity and post-program self-ratings of frequency after controlling for group cohesion. The slope of the line regressing post-program self-rated frequency on baseline motivational intensity at one standard deviation above the mean baseline self-rated frequency was .122, suggesting that participants with higher baseline self-rated frequency were more likely to improve when they had higher levels of baseline motivational intensity. The slope at one standard deviation below the mean was .768. This suggests that participants with lower baseline self-rated frequency were also more likely to improve when they had higher levels of baseline motivational intensity. The effects of increased baseline motivational intensity were more pronounced in students with lower baseline self-rated frequency compared to those with higher baseline self-rated frequency. This relationship can be seen in Figure 15.

Figure 15. Post-program score on the self-report frequency as a function of baseline score on the measure and baseline motivational intensity in the Shift Conversation course.



The other significant interaction was between baseline self-reported frequency, baseline motivational intensity, and group cohesion, $\beta = .204$, $t(159) = 2.615$, $p = .01$. This suggests a three-way interaction; the interaction is different at different levels of baseline self-ratings of frequency. We will first examine the interaction between motivational intensity and group cohesion at one standard deviation above the mean on baseline self-reported frequency, and then examine the same interaction at one standard deviation below the mean on baseline self-reported frequency. Looking first at one standard deviation above the mean on baseline self-report frequency, the slope of the line regressing post-program self-ratings of frequency on baseline motivational intensity at one standard deviation above the mean on group cohesion was .438, suggesting that participants with higher group cohesion were more likely to improve when they had higher levels of baseline motivational intensity. The slope at one standard deviation below the mean was -.873. This suggests that participants with lower group cohesion were less likely to improve when they had higher levels of baseline motivational intensity. This

relationship can be seen in Figure 16. Looking next at one standard deviation below the mean on baseline self-report frequency, the slope of the line regressing post-program self-ratings of frequency on baseline motivational intensity at one standard deviation above the mean on group cohesion was .185, suggesting that participants with higher group cohesion were more likely to improve when they had higher levels of baseline motivational intensity. The slope at one standard deviation below the mean was 2.031. This suggests that participants with lower group cohesion were also more likely to improve when they had higher levels of baseline motivational intensity. The effects were more pronounced in those with lower group cohesion compared to those with higher group cohesion. This relationship can be seen in Figure 17.

Figure 16. Post-program score on the self-report frequency as a function of baseline score on the measure baseline motivational intensity and group cohesion in the Shift Conversation course [Hi Baseline self-report frequency].

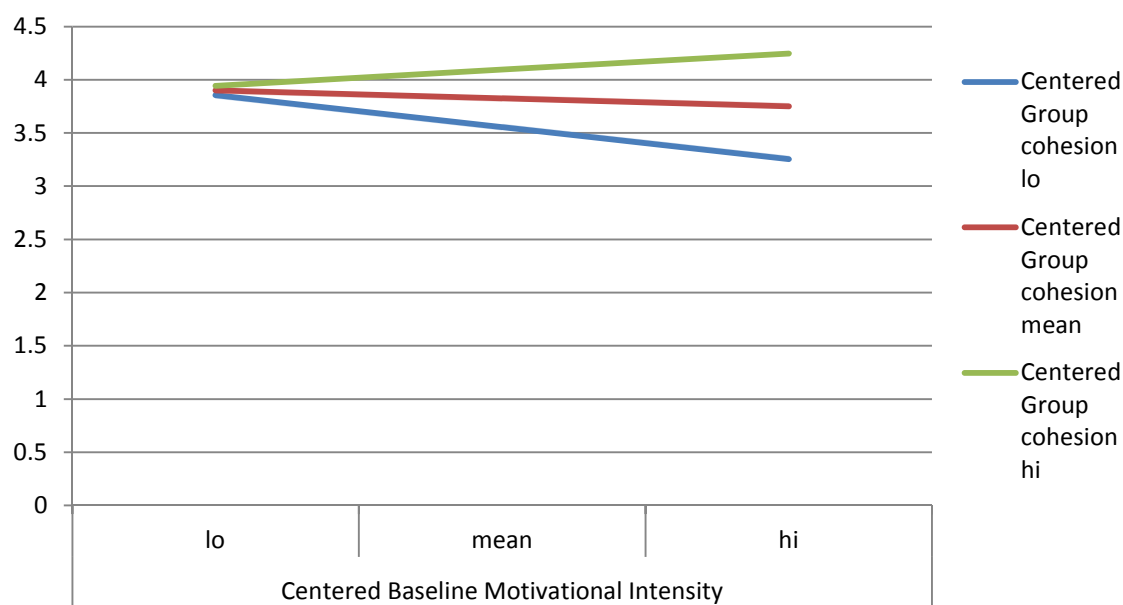
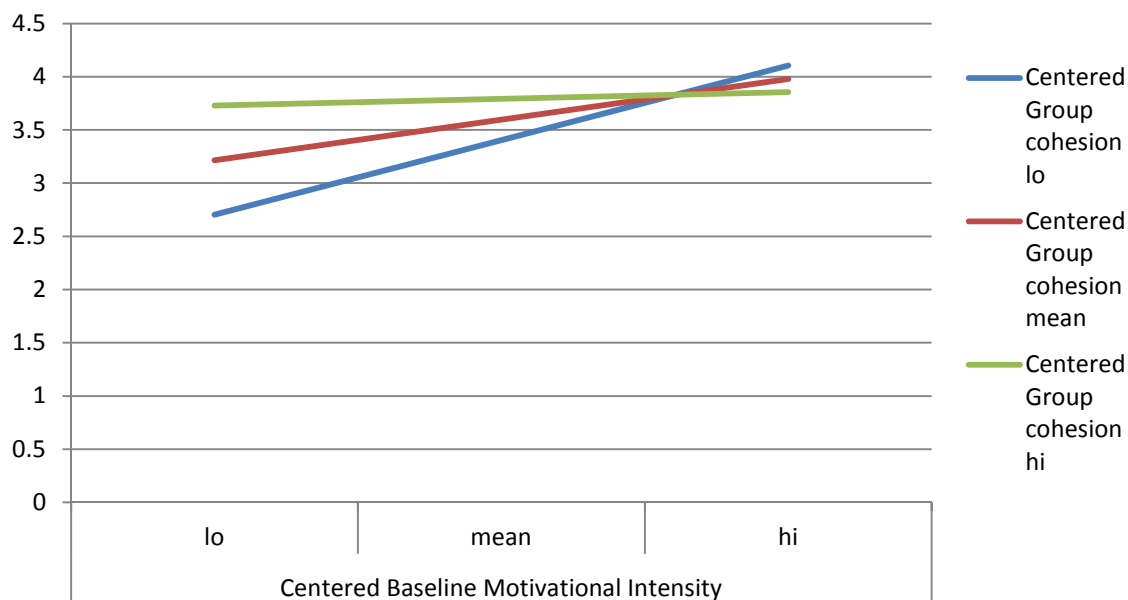


Figure 17. Post-program score on the self-report frequency as a function of baseline score on the measure baseline motivational intensity and group cohesion in the Shift Conversation course [Lo Baseline self-report frequency].



Hypothesis 9D - Group cohesion will be positively correlated with course attendance.

In order to determine if there was a positive relationship between group cohesion and course attendance, we ran simple correlations. These correlations did not indicate a significant positive relationship in any of the three courses ($ps > .17$). These correlations are presented in Table 152.

Hypothesis 9E - At the class level, group cohesion will be positively correlated with attendance rate.

In order to determine if there was a positive relationship between group cohesion and course attendance, we ran simple correlations at the class level. These correlations were not significant in the Shift Basics or Shift Conversation courses; however, a significant positive correlation was found in the Shift Writing course, $r(11) = .734$, $p = .01$. These correlations are presented in Table 153.

Hypothesis 9F - At the class level, group cohesion will be positively correlated with graduation rate.

In order to determine if there was a positive relationship between group cohesion and graduation rate, we ran simple correlations. These correlations were not significant in the Shift Basics or Shift Writing courses; however, a significant *negative* correlation was found in the Shift Conversation course, $r(19) = -.618$, $p = .005$. More cohesive groups showed lower graduation rates than less cohesive groups. These correlations are seen in Table 154.

Hypothesis 9 – Discussion

Although the questions posed by the current study sought to understand relationships between group cohesion and other constructs, a more basic question was posed by English Under the Arches program directors and curriculum developers: Could a class, meeting primarily in an online setting, become cohesive? The short answer to this question is that group cohesion can seemingly be generated in a primarily online setting. This is particularly interesting for the further study of English training in the workplace, as it suggests that group cohesion, and its benefits, may be able to be achieved outside of the typical bounds of the classroom. That said, it is unknown if the level of group cohesion would be the same if students *never* met each other face to face, or if they met face to face for all of their sessions.

The current study sought to determine how group cohesion may be related to motivational intensity. Although there is a relationship between baseline motivational intensity and group cohesion in the Shift Basics course, the relationship between post-program motivational intensity and group cohesion is significant across all three courses. These findings provide evidence for the temporal and dynamic nature of motivation in language learning (e.g., Belmechri and Hummel, 1998; Kruidenier and Clement, 1986). Students may enter a group with

motivation to learn English; this motivation may play a role in creating a cohesive group.

Alternatively, if a group of learners is highly cohesive, this may serve to motivate students to exert more effort in the class. The results of the regression analysis of the change in motivational intensity would seem to support the latter assertion. In every course, group cohesion was found to be a significant predictor of improvement in motivational intensity over the duration of the course.

The results from the regression analyses suggested that group cohesion acted as a significant predictor of improvement in workplace behaviors as assessed by the Can Do list, in both the Shift Basics and Shift Conversation courses. A plausible explanation for this finding is that students in cohesive groups found their class to be a safe place to practice workplace conversations and behaviors. This practice was likely more frequent and of higher quality in more cohesive groups, which appears to have translated to improved workplace functioning. This is not a surprising finding, but it is particularly validating, given that the focus of the program was to improve English in the workplace.

Although it was initially discouraging to fail to see effects of group cohesion in the Shift Writing course, this was not entirely unexpected. The Shift Writing course is based less on partner interaction and conversation, and more on individual work through written tasks. Therefore, success in the course did not depend on fruitful interaction among students; rather, students could practice and improve, even if their group was not entirely cohesive.

At the individual and class levels, it was surprising to see that cohesive classes did not have higher attendance or graduation rates. It was assumed that highly cohesive classes would show the highest levels of attendance and graduate the highest rates of students. One possible explanation for the lack of significance in this case was that group cohesion data was only

collected at the end of the course, from students who had graduated. Therefore, the class level group cohesion figures represented those with the highest attendance, while failing to represent those who had lower attendance numbers. The group cohesion ratings of students who did not complete the course may have been fundamentally different than those who completed the course. This would have likely added variability to the ratings of group cohesion, and may have made relationships between group cohesion and attendance and graduation rates clearer and more robust. Finally, sample sizes when using class as the unit of analysis were relatively small, limiting the likelihood of finding a significant result.

Understanding the impact of group cohesion may be particularly applicable for instructors of English to adults in a workplace setting. Anecdotally, many ESL instructors struggle to create cohesive groups. Some wonder whether the time invested in creating cohesive groups provides significant return; others see the impact of this cohesion on motivation and learning, but do not have data to back up their feelings. Knowing that there is systematic evidence for the impact of group cohesion may lead more instructors to invest time in group building activities.

Causal Path Modeling

In order to demonstrate a more comprehensive picture of the entire model for language learning in the current study, it was necessary to develop a causal path model. The initial plan was to develop a full latent-variable path model using LISREL, but, unfortunately, sample size prevented the execution of this analysis, as the number of parameter estimates was simply too large. The second option was to conduct a path model with the measured variables, again using LISREL. Again, lack of sample size prevented the completion of this analysis. As a result, we decided to pursue path modeling using multiple regression, as opposed to LISREL.

Using CFA, we found previously that the two scales of instrumental orientation could be better represented by a single scale. Therefore, we decided to create a single scale of these items for the path analysis across all courses. Because we had originally defined the model with the separation of linguistic self-confidence and anxiety, and because the results of the correlational analysis suggested that there was very little overlap between the factors, we decided to maintain two separate factors for the path analysis. With respect to the variables of the social network, a one-factor model provided a better fit for the data in the Shift Basics and Shift Writing courses, though a two-factor model was a better fit for the data in the Shift Conversation course. Therefore, in the Shift Basics and Shift Writing courses, we will combine the factors of perceived social milieu and perceived social support, though we will keep them separate in the analyses for the Shift Conversation course.

The language-related variables of analysis are slightly different, depending on the course. In the Shift Basics and Shift Conversation courses, we will be analyzing the standardized measure of proficiency in English, as well as the self- and supervisor-report measures of proficiency to speak English, frequency in speaking English and ability to complete spoken workplace tasks in English, at baseline and at the end of the program. In the Shift Writing course, we will analyze self- and supervisor report measures of proficiency to speak English, frequency in speaking English and ability to complete written workplace tasks in English, at baseline and at the end of the program. Although within each course, there was significant intercorrelation between the language-related variables, none were correlated at high enough a level to be considered redundant. Therefore, separate analysis seems most appropriate.

Baseline Models

Across all courses, the baseline language measures were predicted by student's age of arrival, baseline integrative orientation, baseline linguistic self-confidence and baseline linguistic anxiety. These findings are presented in Tables 155-164. Several significant results were found at baseline. In the Shift Conversation course, both age of arrival ($\beta = -.13$, $t(255) = -2.135$, $p = .034$) and linguistic self-confidence ($\beta = .179$, $t(255) = 2.924$, $p = .004$) were significant predictors of the baseline score on the standardized measure of English proficiency. Age of arrival was negatively related to baseline score, as predicted.

Across all three courses, baseline linguistic anxiety was a significant predictor of self-reported proficiency in English at baseline (Shift Basics: $\beta = -.208$, $t(229) = -3.193$, $p = .002$; Shift Conversation: $\beta = -.182$, $t(302) = -3.263$, $p = .001$; Shift Writing: $\beta = -.309$, $t(117) = -3.491$, $p = .001$). Additionally, in Shift Basics and Shift Conversation, baseline linguistic self-confidence was a significant predictor of self-ratings of proficiency, $\beta = .178$, $t(229) = 2.628$, $p = .009$, and $\beta = .217$, $t(302) = 3.818$, $p < .001$, respectively. Finally, in Shift Writing, age of arrival was a significant predictor of self-reported proficiency, $\beta = -.273$, $t(117) = -3.112$, $p = .002$. None of the associations with baseline supervisor-reported proficiency in English were found to be significant.

Across all three courses, baseline linguistic self-confidence was a significant predictor of self-reported frequency of speaking English at baseline (Shift Basics: $\beta = .253$, $t(229) = 3.718$, $p < .001$; Shift Conversation: $\beta = .252$, $t(302) = 4.518$, $p < .001$; Shift Writing: $\beta = .252$, $t(117) = 2.787$, $p = .006$). Further, in the Shift Conversation course, baseline integrative orientation and linguistic anxiety were significant predictors of baseline self-ratings of frequency, $\beta = .123$, $t(302) = 2.18$, $p = .03$, and $\beta = -.16$, $t(302) = -2.939$, $p = .004$, respectively.

In the Shift Basics and Shift Writing courses, integrative orientation and linguistic anxiety significantly predicted baseline supervisor-ratings of frequency. In Shift Basics, the coefficients were $\beta = -.252$, $t(109) = 2.513$, $p = .013$ for integrative orientation and $\beta = -.228$, $t(109) = -2.477$, $p = .015$ for linguistic anxiety. In the Shift Writing course, the coefficients were $\beta = .613$, $t(21) = 3.264$, $p = .005$ for integrative orientation and $\beta = -.408$, $t(21) = -2.247$, $p = .038$ for linguistic anxiety. Additionally, in the Shift Writing course, linguistic self-confidence was a significant predictor of baseline supervisor-reported frequency, $\beta = -.509$, $t(21) = -2.83$, $p = .012$. Contrary to predictions, this result suggests that higher self-ratings of linguistic self-confidence are associated with lower levels of supervisor-rated frequency of speaking English.

In the Shift Basics and Shift Conversation courses, linguistic self-confidence and anxiety were both significant predictors of self-reported ability to complete spoken workplace tasks. The coefficients for Shift Basics were $\beta = .238$, $t(229) = 3.532$, $p = .001$ for linguistic self-confidence, and $\beta = -.189$, $t(229) = -2.924$, $p = .004$ for linguistic anxiety. In Shift Conversation, the coefficients were $\beta = .257$, $t(302) = 4.622$, $p < .001$ for linguistic self-confidence, and $\beta = -.194$, $t(302) = -3.563$, $p < .001$ for linguistic anxiety. There were no significant predictor variables of self-reported ability to complete written workplace tasks in the Shift Writing course.

In the Shift Basics course, baseline integrative orientation and linguistic anxiety were found to be significant predictors of supervisor-reported ability to complete spoken workplace tasks at baseline, $\beta = .293$, $t(104) = 2.816$, $p = .006$ and $\beta = -.275$, $t(104) = -2.836$, $p = .006$, respectively.

In the Shift Basics and Shift Writing courses, baseline linguistic anxiety was a significant predictor of supervisor-ratings of student confidence to speak English at baseline, $\beta = -.246$, $t(109) = -2.631$, $p = .01$, and $\beta = -.448$, $t(21) = -2.707$, $p = .015$, respectively. Additionally, in Shift

Writing, baseline integrative orientation and linguistic self-confidence were predictors of supervisor-rated confidence, $\beta = .578$, $t(21) = 3.384$, $p = .004$, and $\beta = -.628$, $t(21) = -3.834$, $p = .001$, respectively. Contrary to predictions, but consistent with previously observed relationships in the current study, higher levels of linguistic self-confidence were associated with lower levels of supervisor-rated student confidence.

End of Program Models

Across all courses, the end of program language measures were predicted by the baseline value of the measure in question, student's age of arrival, baseline linguistic self-confidence, baseline linguistic anxiety, group cohesion, attendance, baseline motivational intensity, and end of program motivational intensity. In the Shift Basics and Shift Writing courses, baseline social network was also used as a predictor variable. In the Shift Conversation course, this variable was split into baseline perceived social milieu and perceived social support. Although the significant findings are presented below, it should be noted that across all courses, for all measures, the baseline score was a significant predictor of end of program score ($p < .001$). These results are presented in Tables 165-173.

In the Shift Conversation course, overall attendance and end of program motivational intensity were both significant predictors of the end of program score on the standardized test of proficiency in English, $\beta = -.135$, $t(124) = -2.144$, $p = .034$, and $\beta = .167$, $t(124) = 2.389$, $p = .019$, respectively. Contrary to our expectations, overall attendance negatively predicted the end of program score.

Across all courses, end of program motivational intensity was a significant predictor of self-rated proficiency post-program, (Shift Basics: $\beta = .19$, $t(134) = 2.556$, $p = .012$; Shift Conversation: $\beta = .305$, $t(154) = 3.993$, $p < .001$; Shift Writing: $\beta = .303$, $t(71) = 3.203$, $p = .002$).

In addition, end of program motivational intensity was also a significant predictor of self-rated frequency at the end of the program (Shift Basics: $\beta = .36$, $t(135) = 5.717$, $p < .001$; Shift Conversation: $\beta = .284$, $t(154) = 4.395$, $p < .001$; Shift Writing: $\beta = .351$, $t(71) = 3.675$, $p < .001$).

In the Shift Conversation course, baseline motivational intensity was a significant predictor of self-reported frequency at post-program, $\beta = .201$, $t(154) = 2.61$, $p = .01$. In the Shift Basics course, baseline motivational intensity was a significant predictor of supervisor-rated frequency of speaking English at the end of the program, $\beta = -.447$, $t(43) = -3.091$, $p = .004$. This finding was contrary to predictions; it suggests that higher levels of self-rated motivational intensity at baseline are associated with lower levels of supervisor-rated frequency of speaking English.

In both the Shift Basics and Shift Conversation courses, end of program motivational intensity served as a significant predictor of self-reported ability to complete spoken workplace behaviors in English at the end of the program (Shift Basics: $\beta = .26$, $t(136) = 4.302$, $p < .001$; Shift Conversation: $\beta = .412$, $t(157) = 5.742$, $p < .001$). Additionally, in the Shift Conversation course, baseline linguistic anxiety was a significant predictor of self-reported ability to complete spoken workplace behaviors, $\beta = -.148$, $t(157) = -2.346$, $p = .02$. In the Shift Writing course, end of program motivational intensity was a significant predictor of self-reported ability to complete written workplace behaviors in English at the end of the program, $\beta = .523$, $t(69) = 4.691$, $p < .001$.

In the Shift Basics course, both baseline motivational intensity and end of program motivational intensity were significant predictors of supervisor-ratings of students' confidence to speak English at the end of the program, $\beta = -.324$, $t(43) = -2.118$, $p = .042$, and $\beta = .381$, $t(43) = 2.241$, $p = .032$. Contrary to predictions, higher levels of motivational intensity at baseline

were associated with lower levels of supervisor-reported student confidence at the end of the program; however consistent with predictions, higher levels of motivational intensity at the end of the program were associated with higher levels of supervisor-reported student confidence at the end of the program.

Mediated Relationships

In general, the path model did not predict that social and motivational factors would directly impact learning outcomes. Rather, it was thought that these variables would impact attendance and motivational intensity and that the latter would show the direct effects on learning outcomes. In our path model, there are three potential mediating variables: attendance, baseline motivational intensity and end of program motivational intensity. We will first examine the relationship between baseline variables and attendance. The variables expected to impact attendance were baseline integrative orientation, baseline instrumental orientation, baseline ideal-language self, baseline linguistic self-confidence, baseline linguistic anxiety, group cohesion, baseline motivational intensity and end of program motivational intensity. Additionally, in Shift Basics and Shift Writing, baseline social network was included in the model; in the Shift Conversation course, baseline perceived social milieu and baseline perceived social support were included as separate factors. In none of the courses did we observe significant relationships between the set of predictor variables and attendance. Because this relationship is necessary for mediation, we can say that attendance does not mediate any of the relationships with the outcome variables. These results are found in Table 174.

Our model predicts two meditational relationships through baseline motivational intensity and three through end of program motivational intensity. Primarily, we predicted that

baseline motivational intensity would mediate the relationships between the integrative orientation and language learning outcomes, and between instrumental orientation and language learning outcomes. The first step was to determine if either of these baseline variables was significantly related to the outcome measures. The results for integrative orientation are presented in Tables 175-184; the results for instrumental orientation are presented in Tables 185-194. In the Shift Conversation course, integrative orientation significantly predicted post-program score on the standardized measure, $\beta = -.118$, $t(149) = -2.019$, $p = .045$. This finding is not in the predicted direction, and suggests that higher levels of baseline integrative orientation are associated with lower post-program scores on the standardized measure. In the Shift Basics course, integrative orientation significantly predicted post-program score on the self-report measure of frequency at the end of the program, $\beta = .117$, $t(145) = 2.057$, $p = .042$. Also in the Shift Basics course, baseline instrumental orientation significantly predicted end of program score on the standardized measure, $\beta = -.132$, $t(138) = -2.704$, $p = .008$, supervisor-reported frequency, $\beta = -.26$, $t(47) = -2.037$, $p = .048$, and supervisor-reported ability to complete spoken workplace tasks at the end of the program, $\beta = -.261$, $t(44) = -2.087$, $p = .043$. These findings are not in the predicted direction, as they suggest that higher levels of baseline instrumental orientation are associated with lower post-program scores.

The second step was to examine the relationships between the baseline predictors and baseline motivational intensity. Integrative orientation was a significant predictor of baseline motivational intensity in the Shift Basics and Shift Writing courses, $\beta = .135$, $t(243) = 2.126$, $p = .035$, and $\beta = .178$, $t(123) = 2.001$, $p = .048$, respectively. These findings are presented in Table 205. Across all three courses, instrumental orientation was a significant predictor of baseline motivational intensity (Shift Basics: $\beta = .375$, $t(243) = 6.297$, $p < .001$; Shift Conversation: $\beta =$

.364, $t(315) = 6.954$, $p < .001$; Shift Writing: $\beta = .302$, $t(123) = 3.5$, $p = .001$). These findings are presented in Table 206.

The third step was to determine if baseline motivational intensity was a significant predictor of the language outcomes in the presence of the initial predictor variables. For this analysis, the five relationships we were most interested in were those previously found to be significant: (1) baseline integrative orientation and the standardized measure in Shift Conversation; (2) baseline integrative orientation and the self-report frequency in Shift Basics; (3) baseline instrumental orientation and the score on the standardized measure of proficiency in Shift Basics; (4) baseline instrumental orientation and supervisor-reported frequency in Shift Basics; and (5) baseline instrumental orientation and supervisor-reported ability on spoken workplace behaviors in Shift Basics. We sought to determine if any of these relationships would become weakened or non-significant when the mediating variable of baseline motivational intensity was included in the model. The findings for integrative orientation are presented in Tables 210-218; the findings for instrumental orientation are presented in Tables 219-227.

The evidence suggests that baseline motivational intensity acted as a significant mediator of the relationship between baseline instrumental orientation and supervisor-reported frequency in the Shift Basics course. By including baseline motivational intensity in the relationship between baseline instrumental orientation and supervisor-reported frequency, instrumental orientation was no longer a significant predictor, $\beta = -.124$, $t(47) = -.887$, $p = .38$. In this model, baseline motivational intensity acts as a significant predictor of supervisor-reported frequency, $\beta = -.286$, $t(47) = -2.061$, $p = .045$.

The evidence does not suggest that baseline motivational intensity acted as a significant mediator of any of the other relationships. By including baseline motivational intensity in the

relationship between baseline integrative orientation and the standardized measure in Shift Conversation, there was virtually no change in the statistical relationship, $\beta = -.119$, $t(149) = -2.036$, $p = .044$. The inclusion of baseline motivational intensity in the relationship between baseline integrative orientation and self-reported frequency in Shift Basics also showed very little change, $\beta = .116$, $t(145) = 2.024$, $p = .045$. The same was shown for the relationship between baseline instrumental orientation and the standardized measure, $\beta = -.145$, $t(138) = -2.808$, $p = .006$. We found the same for the relationship between baseline instrumental orientation and supervisor-reported ability to complete spoken workplace tasks, $\beta = -.301$, $t(44) = -2.143$, $p = .038$.

In addition to predicting that the relationships between integrative and instrumental orientations and language learning outcomes would be mediated by baseline motivational intensity, we also predicted that these relationships would be mediated by end of program motivational intensity. Additionally, we predicted that end of program motivational intensity would mediate the relationship between group cohesion and language learning outcomes.

Because the analyses above isolated the significant relationships between the integrative and instrumental orientations and language learning outcomes, we will examine the relationships between group cohesion and the language learning variables in order to determine which were significant and should be pursued further. The results for group cohesion are presented in Tables 195-204. In the Shift Basics course, there was a significant relationship between group cohesion and self-reported proficiency ($\beta = .138$, $t(145) = 2.196$, $p = .03$), supervisor-reported proficiency ($\beta = .246$, $t(47) = 2.113$, $p = .04$), and self-reported frequency ($\beta = .126$, $t(145) = 2.324$, $p = .022$). In both the Shift Basics and Shift Conversation courses, there was a significant relationship between group cohesion and self-reported ability on spoken

workplace behaviors as assessed by the Can Do list, $\beta = .181$, $t(147) = 3.443$, $p = .001$, and $\beta = .142$, $t(162) = 2.147$, $p = .033$, respectively.

Again, as with baseline motivational intensity, we sought to examine the relationships between the predictors and end of program motivational intensity. Integrative orientation was a significant predictor of end of program motivational intensity in the Shift Conversation course, $\beta = .205$, $t(146) = 2.75$, $p = .007$. Across all three courses, group cohesion was a significant predictor of end of program motivational intensity (Shift Basics: $\beta = .292$, $t(148) = 3.706$, $p < .001$; Shift Conversation: $\beta = .301$, $t(162) = 4.006$, $p < .001$; Shift Writing: $\beta = .474$, $t(74) = 4.6$, $p < .001$). Instrumental orientation was not significantly related to end of program motivational intensity in any course ($p > .195$). These findings are presented in Tables 207-209.

The third step was to determine if end of program motivational intensity was a significant predictor of the language outcomes in the presence of the initial predictor variables. For this analysis, the relationships we were most interested in were those previously found to be significant. We sought to determine if any of these relationships would become weakened or non-significant when the mediating variable of end of program motivational intensity was included in the model. The findings for integrative orientation are found in Tables 228-237; the findings for instrumental orientation are found in Tables 238-247; the findings for group cohesion are found in Tables 248-257.

The evidence suggests that end of program motivational intensity acted as a significant mediator of the relationships between group cohesion and the learning outcome variables. When end of program motivational intensity was included in the regression models, group cohesion was no longer a significant predictor of any of the outcome variables that it was when end of program motivational intensity was not included. The relationships between group

cohesion and self-reported and supervisor-reported proficiency in the Shift Basics course became non-significant, $\beta = .08$, $t(144) = 1.243$, $p = .216$, and $\beta = .223$, $t(47) = 1.837$, $p = .07$. The same was true for the relationship between group cohesion and self-reported frequency in the Shift Basics course, $\beta = .043$, $t(146) = .816$, $p = .416$. The relationships between group cohesion and self-reported ability to complete spoken workplace behaviors in both the Shift Basics and Shift Conversation courses became non-significant, $\beta = .106$, $t(146) = 2.056$, $p = .042$, and $\beta = .022$, $t(162) = .344$, $p = .731$, respectively. In each of these cases (except supervisor-reported proficiency), end of program motivational intensity was a significant predictor of language learning outcomes ($ps < .005$).

The evidence does not suggest that end of program motivational intensity mediated the relationship between integrative orientation and the score of the standardized measure. The inclusion of end of program motivational intensity in the relationship between baseline integrative orientation and the standardized measure showed very little change, $\beta = -.123$, $t(139) = -2.057$, $p = .042$. However, end of program motivational intensity also acted as an additional significant predictor in this relationship, $\beta = .153$, $t(139) = 2.482$, $p = .014$.

CHAPTER FOUR:

GENERAL DISCUSSION

We conducted a study of a language program, designed to teach English to immigrant learners in the workplace. The program was comprised of three courses teaching beginning, intermediate and advanced learners of English. The study tested hypotheses related to the impact of students' age of arrival, their motivational orientations to learn English, and social variables on motivated behaviors and learning outcomes. Although we found some support for our hypotheses, we had hoped to be in a stronger position to discuss comprehensive implications of our findings for the literature on language learning, particularly among adult learners. In what follows, we discuss (a) the results which replicated findings in the language literature, pertaining to learning outcomes, linguistic self-confidence, linguistic anxiety, motivational intensity and group cohesion; (b) the lack of consistency in relationships between motivational and social factors with attendance and graduation and the lack of consistency in outcomes across courses; (c) the limitations of our study as they pertain to supervisor and post-program data; and (d) potential implications for the field of adult language instruction.

Expected Findings

Although there were a considerable number of hypotheses which did not receive support, it is important to take note of those hypotheses which were consistent with expectations and discuss the meaning for the learners and for the workplace. One of the most expected findings, and also one of the most important, was improvement on the language

learning outcomes. Students in the Shift Basics and Shift Conversation courses improved significantly on the standardized measure of English proficiency, and students across all courses improved on self-report indices of proficiency and frequency in English usage, as well as in workplace behaviors. Although research has suggested that self-report measures do not adequately assess learning (e.g., Kruger & Dunning, 1999), the fact that the self-report measures we used showed moderate to strong correlations with the standardized measure of English proficiency, we felt more confident that these self-report measures did a satisfactory job of reflecting their underlying constructs. These findings suggested that students improved in their English proficiency over the duration of their courses, and that they were able to correctly assess that they had progressed.

Additionally, the results of the current study suggest that, in each course, mean levels of linguistic anxiety decreased from baseline to the end of the program. This may seem like a relatively obvious finding; however, even though research on linguistic anxiety is fairly extensive, there is little work suggesting that mean levels of the construct will decrease over time. This may be an important finding for instructors, as it may help them to recognize that their efforts to reduce the fears of anxious students do have impact. Additionally, it helps to support the adage that one simply needs to practice a task in order to become more comfortable with it. This finding also has important implications for the workplace. With decreased anxiety, students may be more likely to initiate conversations with customers who speak only English and provide these customers with improved service.

It was expected that students who entered classes with higher linguistic self-confidence would demonstrate higher baseline skill levels. We found support for this finding across the vast majority of measures and across all courses. It is likely that these students do possess

somewhat greater abilities in English, due to their desire to speak the language; however, it is equally likely that these students believe that their abilities are greater than what they are and rate themselves as such. In either case, students' linguistic self-confidence is a consistent predictor of ability ratings at baseline.

Although it was expected that specific motivational orientations (e.g., integrative and instrumental orientations) would be the driving forces behind motivated behaviors and learning outcomes, the results of the current study suggest that motivational intensity (i.e., a more generalized attitude toward course completion) and group cohesion may have played a more important role. Although results suggested that students in more cohesive groups did not attend more classes on average than less cohesive groups, and that they did not graduate more often, students in more cohesive groups were more likely to improve on language outcomes. This was mediated by end of program motivational intensity, suggesting that although students in cohesive groups were more likely to improve, it was the greater degree of effort expended that truly drove the results. It is encouraging that the relationship between these variables suggests that students in more cohesive groups display higher motivational intensity at the end of the program, as motivational intensity is related to language gains.

The two outcomes that showed the greatest improvements related to group cohesion and motivational intensity, particularly in the Shift Basics and Shift Conversation courses, were frequency of speaking English and ability to complete spoken workplace behaviors. These outcomes were those most specifically targeted in the English Under the Arches curriculum. Specifically, the courses used contextualized English and focused on the vocabulary and grammar that students would need to manage the restaurant. Class activities frequently required students to partner with one another in order to role-play scenarios in which they

would speak English with customers or other employees. It is likely that in more cohesive groups, students were encouraged by their classmates to speak English more often, using both in-class and on-the-job activities to practice.

Lack of Replication and Consistency

Relationships at Baseline

Counter to expectations, few of the predicted baseline associations were supported by the data. Although relationships between baseline linguistic self-confidence and anxiety and measures of proficiency and frequency in English usage were found to be significant, the relationships between these baseline language measures and age of arrival and integrative orientation did not generally receive the same support. One possible reason for the lack of significant findings among these relationships may have resulted from the restriction of range on the baseline variables of proficiency and frequency in English within each course. Students were placed in specific courses—Shift Basics, Shift Conversation or Shift Writing—based on their baseline level of English proficiency, initially measured by the standardized language assessment. Each class contained a more homogeneous collection of students which showed limited variability in English proficiency. As a result, when examining relationships within each course, it may have been difficult to detect significance. We thought that one way to increase the variability in the baseline measures would be to collapse across the courses and examine the relationships in the aggregate. In the relationships between age of arrival and the baseline variables, three relationships were significant: standardized measure, self-report proficiency to speak English and self-report frequency of speaking English. Unfortunately, in the relationships between the baseline integrative orientation and the baseline variables, only the relationship with self-report frequency reached significance, and this relationship had already been

significant in the Shift Conversation course. The correlation coefficient actually decreased when we did not control for course. In summary, it appears possible that restricted range may provide some explanation for the lack of significant relationships between age of arrival and the language variables, but this does not seem to be the case for the relationships with the integrative orientation.

Relationships Between Predictor Variables and Attendance

One of the major hypotheses of the current study suggested that, although not all social and motivational factors may have direct impact on language learning outcomes, these variables would be associated with course attendance and other motivated behaviors, and that these behaviors would then directly impact the language learning outcomes. Therefore, it was surprising when very few significant relationships were seen between each of the social and motivational factors and attendance.

One potential explanation for these non-significant relationships is that many students, because they are employees in the restaurants in which they are attending classes, may not always have the opportunity to attend class no matter their level or type of motivation, due to their work responsibilities. The program is designed to allow every student to conveniently attend every class session; however, there may be a negative side to attending language classes at one's place of business, particularly during normal business hours. The reality is that some students are called away to busy restaurants that have not been adequately staffed to allow for them to be off the floor for the hour of class. Other students hold managerial positions in the restaurant and their responsibilities prevent them from regularly attending class. For these reasons, and countless others, even the most motivated students may not be able to attend more classes than less motivated students.

Another possible explanation for the lack of relationship between motivational orientation and attendance is that the orientations posed in the current study are not really motivating for students; other unmeasured motivations may be driving attendance. Although anecdotal evidence would suggest that the instrumental orientations of workplace and family would be particularly motivating for students and that experiencing high levels of these orientations would lead to greater attendance, the results of the current study would not support these hypotheses. Rather, it is entirely possible that additional factors not explored in this study (e.g., desire for formal education, desire to learn about technology, time off the floor at work, connection with the instructor, a stubborn or perseverant personality, etc.) could be having a greater influence on attendance than any of the explored factors. Because we did not design measures to assess these orientations, we cannot rule them out as potential motivators. Future research in motivation should seek a greater understanding of how these factors may be related to course attendance.

The Relationship between Attendance and Learning Outcomes

We found little support for the links between social and motivational factors and course attendance, and we found even less support for the links between attendance and learning outcomes. Of the two significant main effects found for attendance in the Shift Conversation, only one of them was in the predicted direction. This finding suggested that students who attended more classes were more likely to improve in their workplace behaviors. One possible explanation for the lack of findings results again from restriction of range, in this case with respect to attendance. Only students who completed the course provided post-program data. Therefore, only these students were included in the analysis of learning outcomes. Given that students needed to attend at least 75 percent of class hours in order to graduate, this meant

that all students included in the analysis of learning outcomes would have had an attendance percentage between 75 and 100 percent. This restriction severely reduced the variability in student attendance percentages, limiting the chance of observing a significant relationship. Related to the restriction of range in the attendance data was the missing post-program data for students who did not complete the program. Data from these students may have shown considerably less change than from students who completed the program. (This point is discussed in greater detail in the Limitations section.) If both the full range of attendance had been represented, and if students who had not finished the course had also provided post-program data, we may have been able to see clearer and more robust relationships between attendance and learning outcomes.

Even if both of these measures had been taken, results may have still indicated that attendance was not linked to learning outcomes. If this was the case, it would serve as an indication to venture beyond mere course attendance as a measurement of motivated behavior to a measure of exerted effort. A measure of this sort—most likely completed by the course instructor—could indicate how actively a student is participating when they are attending class. This measure could potentially show stronger relationships with social and motivational factors, as well as with learning outcomes.

Consistency across Courses

Although some results were similar across the courses, the majority of the results found in one course were not replicated in the others. There are several possible explanations for the lack of consistent relationships across courses. Primarily, as has been mentioned previously, the population of learners in each course was markedly different as it pertained to their level of English proficiency at baseline. Students in the Shift Writing course entered with significantly

more proficiency than students in the Shift Conversation course, who entered with significantly more proficiency than students in the Shift Basics course. This was, of course, done by design, as students were placed in a particular course according to their proficiency level; however, it was this difference, among others, which necessitated the splitting of data into the three courses for analysis in order to control for differential effects.

Second, each of the courses was of different length. At eight weeks, Shift Basics was the shortest class in duration, and was meant to quickly prepare students for Shift Conversation, which, at 22 weeks, was the longest course. Shift Writing, at twelve weeks, fell in between, but was closer in length to Shift Basics. It is possible that some of the inconsistency in effects across the different courses was generated merely by the amount of time that students actually spent in class. It is reasonable to suggest that the factors which motivate students to attend, exert effort in and persevere in a shorter course may not function in the same way in a longer course. For example, we saw that social support was positively related to attendance in both the Shift Basics and Shift Writing courses, but not in the Shift Conversation course. For shorter courses, social support may be more important for maintaining student attendance; students with higher levels of social support may attend more class sessions because they receive more encouragement. On the other hand, in a longer course, students may internalize their desire to continue pursuing the language and rely less on social support.

Different relationships were also seen between group cohesion and motivational intensity when comparing courses of different lengths. In Shift Basics, a significant relationship was seen between group cohesion and baseline motivational intensity, as well as end of program motivational intensity; in the Shift Conversation and Shift Writing courses, a significant relationship was only seen at the end of the program. In these latter courses, it appears that

motivational intensity changed throughout the course, due in part to the cohesion of the group. It is likely that this change takes time to occur, making it more likely to happen in longer courses. It is unknown if the same effect would have occurred in the Shift Basics course, but the relationship did not become significantly stronger at the end of the program.

Finally, each course presented different content and emphasized different outcomes. Shift Basics focuses on the most basic communication skills and vocabulary that managers need to communicate with customers and other employees. Although the Shift Conversation course includes all of the content presented in Shift Basics, it also presents the language necessary to train another employee in English, to provide constructive feedback, and to resolve customer complaints. The additional, more advanced content presented in the Shift Conversation course clearly distinguishes the two courses. Furthermore, both of these courses are distinct from the Shift Writing course, which does not focus at all on the spoken tasks that need to be completed in the restaurant, but rather on more advanced managerial tasks that require greater writing proficiency. Because of the unique emphases of each of the courses, we would not necessarily expect to see the same changes in English proficiency and frequency across all three courses.

Although it was not originally hypothesized that there would be differential effects across courses in what motivated students and what influenced their learning outcomes, it perhaps makes more sense that differences existed across the courses, given that the courses are taught to different learners over different amounts of time, using different content. Although this does not necessarily explain any specific differences in motivations, it does suggest future research should focus more closely on how effects may differ based on the course being examined.

Limitations

Uncollected data

The major limitations of the current study centered on lack of data. This data came in two forms: (1) missing data that we intended to collect, but were unable to; and (2) data that in retrospect we should have collected, but did not originally set out to collect. Lacking these data limited the conclusions which could be drawn in the current study. According to the original design of the experiment, data would be collected from participants and their supervisors at the beginning of the course and following the program. In reality, we were missing post-program data from students who did not complete the course, some supervisor data at baseline and the vast majority of supervisor data at the end of the program.

Missing Data

We will first discuss the impact of missing post-program data from those students who did not complete the course. Primarily, any paired-samples analyses which compared baseline and post-program data were limited to only the participants who provided data at both baseline and post-program. In the current study, any of the analyses measuring changes in social or motivational factors or changes in learning outcomes are limited to including students who have completed the course, decreasing the available sample size and ability to achieve statistically significant results. Second, losing data from students who did not complete the course is limiting to the study because it is the result of differential attrition. In all studies, missing data at the end of a program would cause concern; more concerning in the current study is the fact that the collected data comes from a sample that is potentially different from that of the data that was not collected. Students who did not complete the course would likely have provided systematically different data than students who completed the course. If data had been

collected for all students, we likely would have seen greater variability in the post-program social and motivational variables (particularly group cohesion, which was only collected at the end of the program), as well as in the language learning outcome variables. This greater variability could have allowed us to uncover more and stronger relationships between social and motivational factors and learning outcomes, as well as between attendance and learning outcomes.

Because group cohesion data was only collected at the end of the program, the observed levels are limited to students who completed the course. Students who finished the course may have continued attending in part because they felt that the class was cohesive, whereas students who did not complete the course may have stopped attending if they found that the class was not cohesive. Unfortunately, we are missing the potentially differing opinions of students who did not complete the course. Missing this data calls into question the validity of the observed links between group cohesion and attendance and graduation rates at the class level.

In addition to missing some end of program student data, missing supervisor data—some at baseline, but particularly at the end of the program—placed limitations on the reliability and generalizability of the findings. At baseline, the sample size of supervisor data was satisfactory. Therefore, relatively robust correlations could be measured between baseline predictor variables and supervisor ratings. However, in analyses involving language learning outcomes, supervisor data was collected for less than 10% of students in Shift Conversation and Shift Writing, ruling out the possibility of data imputation. This severely limited our ability to run analyses examining changes between baseline and end of program.

Collecting supervisor data is critical for two reasons. As stated previously, self-report data is not as valid as data collected from peers or evaluators (e.g., supervisors, instructors). Third-party evaluators have been shown to provide better judgments of progress than learners themselves, because they are made from an external, generally more expert position (e.g., Kruger & Dunning, 1999). It is possible that students who are learning English may be adequate judges of their own progress and proficiency in English (as evidenced by the correlation between self-report and standardized measures of English proficiency), but these judgments are not likely as good as those of supervisors who, if they are not native English speakers, at least speak considerably more proficient English than the students. Although the self-report data that we collected correlated significantly with standardized measurement, more extensive supervisor data could have corroborated our findings.

Supervisor ratings were also important in the current study, because supervisors were in the best position to evaluate students' progress in the workplace. Previous research had assessed progress through self-report measures, test scores and course grades (e.g., Carroll, 1981; Chastain, 1975; Gardner & Lambert, 1972). Although the current study employed the first two, it also examined change in workplace behaviors. Certainly all of these can be considered valid outcome measures; however, the measures of workplace behaviors have greater practical significance as these are the outcomes on which restaurant managers, owners and customers place greater importance. Having students rate themselves on these behaviors is valuable; because they are concrete and provide opportunity for immediate feedback, students are more likely to provide valid ratings. For example, a student who is asked about his or her ability to resolve customer complaints likely has a number of instances of success or failure to reflect on when answering this question. That said, supervisor ratings of these behaviors would likely be

of higher accuracy, as supervisors are charged with evaluating behaviors in the restaurant.

Having their judgments of students' progress on workplace behaviors would provide strong evidence for the practical effectiveness of the program. Unfortunately, the amount of data collected from supervisors was not enough to draw any firm conclusions.

Future research might not only focus more on the collection of supervisor data, but could also explore the inclusion of supervisor ratings of employee behavior as it happens. If supervisors measured employee job performance as employees were actually performing the behaviors, this could add a level of validity to the measurement that the retrospective completion of a paper and pencil measure would not provide. Additionally, rating observable behaviors may help supervisors to recognize where students have improved the most and where they may still need the most assistance.

Unplanned Data

In addition to the missing data which was part of the original data collection plan, looking back, it would have been beneficial to gather additional data which was not part of the original collection plan. Namely, in the same way that supervisor data could have informed us about student behaviors and progress within the workplace, instructor data could have provided insight into students' progress within the language classroom. Throughout the course of their careers as teachers of English to speakers of other languages, instructors have observed many students progress from speaking little to no English to being able to communicate with fluency. Instructors could have provided more expert opinions about changes in student proficiency and frequency of English usage. Additionally, their ratings of classroom behaviors (e.g., exerted effort) would have added to the case for the mediation between social and motivational factors and learning outcomes.

Lack of a Control Group

One of the major limitations placed on the study from its inception was the lack of control group. Due to the expense of using a control group, data was only collected from students who would be participating in an English Under the Arches course and their supervisors; no comparative data was collected from employees who did not participate in the program. Therefore, the power of the conclusions which can be drawn from the data are limited. Because no control group was used, all learners could have only been experiencing maturation; changes in language proficiency could have happened without the class, and employees who did not participate in the class may also have experienced increases in language proficiency. Although this is unlikely, it cannot be ruled out.

The lack of a control group is particularly relevant to discuss in the current study because of the particular sample of learners who were enrolled in the course. Students chosen for English Under the Arches were thought to be highly-motivated, high-potential employees. These students may have represented the best chance among all employees to learn language. Although it was suggested in the previous paragraph that all employees may have experienced equal gains as a result of maturation, it is also important to acknowledge the possibility that English Under the Arches may have worked best for students with high motivation. Students who were not part of the program may have represented a significantly different population of learners. The results found in the current study may not have been found among restaurant employees who did not display as much potential or motivation.

Lack of a Language Aptitude Test

Research on language learning has defined language aptitude as one of the most important constructs in determining the degree to which a learner will have success in his or her

second language (Carroll, 1981). Therefore, it is regrettable that a measure of language aptitude was not collected in the current study, even though one existed (MLAT; Carroll & Sapon, 1959). At the time that the research for the current study was conducted, emphases were placed on determining the level of success of the program and assessing whether or not this success could be replicated at a larger scale, rather than establishing why individual learners experienced greater success or failure in their course. For that reason, although language aptitude was seen as an important construct, its measurement was not central to the data collection effort. If measures of language aptitude had been drawn at baseline, conclusions regarding the importance of the construct, particularly among adult immigrant learners in the workplace, could have been drawn. Future research in workplace language training could include measures of language aptitude in order to determine its relevance among a specific, but important and growing population of learners.

Uniqueness of the Sample

The sample of participants included in the current study was not one previously studied. All participants were immigrants to the United States, whose native language was Spanish, and who were learning English in the workplace. Previous research focused largely on student-learners, with a variety of different native languages, who generally learned foreign language in a scholarly setting. The sample of learners in the current study was chosen intentionally to be representative of other learners with similar backgrounds. Therefore, although the sample is somewhat unique, this does not mean that the findings of the current study could not generalize to other similar learner groups. In fact, even if the findings only generalized to other similar learner groups, with similar characteristics, this could still have great value; theoretically, the model used in the current study could help to shape comprehensive immigration reform.

However, it must, of course, be noted that there is no guarantee of generalizability, even to similar learners. Specifically, the findings may not transfer to learners whose first language is not Spanish, to learners who are not in the food service industry, to those who do not work for McDonald's, or even to those who do not work for certain owners within McDonald's.

Quality of Outcome Measures and the Social and Motivational Scale

One of the limitations in this study dealt with restriction of range on variables of proficiency and frequency in English usage at baseline, particularly when controlling for course. Each of the language outcome measures possessed unique strengths and weaknesses. On the standardized measure, a one-level change represented a significant improvement; with a more sensitive measure, it would have been possible to note proficiency improvements that did not exceed the one-level threshold. That said, the standardized measure did allow for scores between levels 0 and 10, giving it the largest possible range of any of the outcome measures. The self- and supervisor-report measures of proficiency and frequency of English usage, as well as the measures of workplace behaviors, used 5- and 6-point Likert-type scales. These could have been expanded to 10-point or larger scales; however, although this would have likely added variability to the measurement, it may have also come at the cost of added error. Further, even though there may be a greater chance of limited variability when using scales with fewer response options, they are among the most commonly used in psychological research, and have been found to yield significant variability (e.g., Allen & Seaman, 2007; Likert, 1932).

Another potential concern regarding the measurement quality resulted from the use of single-item scales to assess ideal language self and linguistic anxiety. Admittedly, using single-item scales for these constructs was not ideal. In order to have a better understanding of these constructs and to better measure their reliability, using additional items would have been

preferred. That said, it was unrealistic in the current study to include additional items, particularly on the motivational scale. Students were provided with a somewhat limited amount of time to complete the measures; adding even a few more items would have increased the time it took to complete the measure and likely the fatigue associated with it. This would likely have provided diminishing returns, and other items may not have been answered as a result.

Implications

Although many of the expected relationships between social and motivational variables did not receive statistical support, it is important to note the effect of group cohesion and motivational intensity, particularly when considering their impact on the language classroom. During the planning stages of the English Under the Arches program, several members of the planning committee wondered aloud if community could be built among a class held—in large part—online. The current study was able to show that this was indeed the case. Although the vast majority of language instructors would likely argue that better community could be created in a face to face setting, the current study found that this is not completely necessary. Even though they may only see each other once a month, students can still become interpersonally attracted to other students in their class and feel that these students are pursuing the same goals of learning English. Further, the current study was able to show that group cohesion could impact the degree of motivational intensity felt by the students. Students in groups with higher levels of cohesion experienced significantly greater gains in motivational intensity from baseline to the end of the program than students in groups with lower cohesion.

Additionally, group cohesion was found to significantly predict improvements in workplace behaviors for students in the Shift Basics and Shift Conversation courses, as well as frequency in speaking English in these courses. This has important implications for instructors of

adult language learners and adds validity to a finding that they have known anecdotally for years. Students in highly cohesive groups perform at better levels than do students in groups with lesser cohesion. Therefore, it is important to spend time at the beginning of a course to build cohesion among students. This may involve ice-breaker games, partner activities or informal conversation in order to increase interpersonal attraction, and reminders that all students are in the class to improve their English in order to enhance the feeling of shared goals. Through these tactics, students will likely feel more attached to the others in their class and to the class itself. At the time, these activities may seem to be taking time away from valuable instruction, but the current study suggests that they will pay dividends as the course progresses.

The results suggest that, although group cohesion is itself valuable, it is most valuable in that it increases the motivational intensity of the students. Students in highly cohesive groups are more likely to report that they exert more effort in class. These students, too, experience better learning outcomes than those with lower motivational intensity. Therefore, not only should instructors spend time building cohesive groups, they should also attempt to increase the degree of effort that students exert inside and outside of the classroom. It is likely that through this heightened effort, students will experience the greatest gains in learning.

Another important implication of the work is more basic to teaching immigrants in the workplace. The current study suggests that English Under the Arches is successful at English instruction. Students progress in their proficiency and frequency of English usage, and in behaviors in the workplace. The majority of this learning takes place through an online classroom, where students take classes at their place of business. This is potentially revolutionary for workplace instruction, particularly of immigrant learners. It is important to remember, however, that students selected for this program all work in a restaurant setting. It

is possible that this class is unique in its learning outcomes and that this specific course may not be as helpful for language training in the general immigrant population or even in other sectors of the service industry as it is within the food service industry. That said, programs of this sort are likely to provide sufficient language training and beneficial outcomes for immigrants in a wide variety of sectors. One important aspect that this program has, and that others like it should have, is contextual learning. While providing contextual learning obviously does not guarantee language success, the literature on the topic has suggested that contextualized language learning is more impactful than straight grammar and conversation without a context for learning.

The fact that the program is successful has important implications for comprehensive immigration reform in the United States. Because immigrants will likely need to both hold a job and be in the process of learning English concurrently in order to be on the road toward long-term residency and citizenship, there will be a need for language instruction in the workplace. Because McDonald's has shown that English Under the Arches can be an effective language instruction tool, it may provide a model for other similar businesses in the service industry, or even for other business who employ a similar population of learners. A program of this sort has the potential to change the face of immigration reform by providing a workable solution for undocumented immigrants to become legal workers and ultimately strengthen the nation's economy. Additionally, by providing workers a path to long-term residency and citizenship, this would likely improve employee loyalty and increase employee retention.

Conclusion

In conclusion, this program of research yielded generally unsupportive data. We have speculated about (a) reasons why we observed certain relationships that were expected,

particularly with respect to linguistic self-confidence and anxiety, motivational intensity and group cohesion; (b) reasons why we observed little consistency in relationships across courses; (c) the effects of missing data and how this could be remedied with future research; and (d) potential implications for the field of adult language instruction in the workplace. The fact that this line of work did not provide unequivocal support for the relationships between social and motivational variables and motivated behaviors and language learning outcomes shows that motivation and language learning scholars should continue to investigate the relationships among these variables in efforts to better understand how motivation and which motivations impact behaviors and language learning outcomes.

APPENDIX:

TABLES

Table 1. Assessment of Pre-Post Change on Proficiency Measures

EUA Course	Measurement Category	Proficiency Measure	t	df	p
Shift Basics	Standardized Measure	BEST Plus	9.762	110	<.001
		Proficiency	9.872	148	<.001
	Self-report	Frequency	7.502	150	<.001
		Can Do	8.838	150	<.001
		Supervisor-report	1.441	49	0.156
	Supervisor-report	Frequency	6.563	49	<.001
		Confidence	6.225	49	<.001
		Can Do	8.366	46	<.001
Shift Conversation	Standardized Measure	BEST Plus	2.144	69	0.036
		Proficiency	11.698	171	<.001
	Self-report	Frequency	9.408	170	<.001
		Can Do	9.956	176	<.001
		Supervisor-report	0.089	9	0.931
	Supervisor-report	Frequency	1.579	9	0.149
		Confidence	0.896	9	0.394
		Can Do	0.074	10	0.942
Shift Writing	Self-report	Proficiency	11.608	83	<.001
		Frequency	6.502	83	<.001
		Can Write	6.036	81	<.001
	Supervisor-report	Proficiency	7.39	5	0.001
		Frequency	1.512	5	0.191
		Confidence	2.654	5	0.045
		Can Write	1.789	5	0.134

Table 2. Correlations between Baseline Measures of English Proficiency (Student ratings)

EUA Course	Baseline Measure	Proficiency	Frequency	Can Do	Can Write
Shift Basics	BEST Plus	.426	.479	.539	-
	Proficiency		.568	.629	-
	Frequency			.711	-
Shift Conversation	BEST Plus	.430	.289	.392	-
	Proficiency		.381	.567	-
	Frequency			.543	-
Shift Writing	Proficiency		.395	-	.469
	Frequency			-	.465

Table 3. Correlations between Baseline Measures of English Proficiency (Supervisor ratings)

EUA Course	Baseline Measure	Proficiency	Frequency	Confidence	Can Do	Can Write
Shift Basics	BEST Plus	.341	.318	.295	.358	-
	Proficiency		.481	.481	.513	-
	Frequency			.781	.760	-
	Confidence				.734	-
Shift Conv.	BEST Plus	.416	.234	.299	.319	-
	Proficiency		.518	.668	.694	-
	Frequency			.739	.745	-
	Confidence				.798	-
Shift Writing	Proficiency		.456	.556	-	.635
	Frequency			.758	-	.35
	Confidence				-	.527

Table 4. Correlations between Baseline Measures of English Proficiency (Comparison of Student and Supervisor ratings)

EUA Course	Self Ratings	Supervisor Ratings			
		Proficiency	Frequency	Can Do	Can Write
Shift Basics	Proficiency	.395	.451	.456	-
	Frequency		.574	.535	-
	Can Do			.468	-
Shift Conv.	Proficiency	.379	.231	.374	-
	Frequency		.403	.392	-
	Can Do			.402	-
Shift Writing	Proficiency	.205	.006	-	.179
	Frequency		.359	-	.316
	Can Write			-	.498

Table 5. Correlations between Baseline Measures of English Proficiency and Course Attendance

EUA Course	Measurement Category	Proficiency Measure	n	r	p
Shift Basics	Standardized Measure	BEST Plus	189	.201	.005
	Self-Ratings	Proficiency	248	.137	.031
		Frequency	248	.096	.131
		Can Do	248	.135	.033
	Supervisor Ratings	Proficiency	124	.032	.723
		Frequency	123	.075	.411
		Confidence	123	.03	.74
		Can Do	118	.058	.531
Shift Conversation	Standardized Measure	BEST Plus	268	-.053	.384
	Self-Ratings	Proficiency	311	-.034	.545
		Frequency	311	-.038	.509
		Can Do	311	-.071	.213
	Supervisor Ratings	Proficiency	82	-.008	.943
		Frequency	83	-.203	.065
		Confidence	83	-.198	.073
		Can Do	80	-.271	.015
Shift Writing	Self-Ratings	Proficiency	125	-.047	.606
		Frequency	125	-.053	.556
		Can Write	123	-.025	.788
	Supervisor Ratings	Proficiency	22	.405	.061
		Frequency	22	.425	.049
		Confidence	22	.314	.154
		Can Write	18	.604	.008
All courses	Standardized Measure	BEST Plus	460	-.078	.097
	Self-Ratings	Proficiency	684	-.067	.081
		Frequency	684	-.079	.04
		Can Do	562	-.067	.111
	Supervisor Ratings	Proficiency	228	-.017	.794
		Frequency	228	-.086	.198
		Confidence	228	-.124	.062
		Can Do	201	-.183	.009

Table 6. Correlations between Age of Arrival and Baseline Measures of English Proficiency

EUA Course	Measurement Category	Proficiency Measure	n	r	p
Shift Basics	Standardized Measure	BEST Plus	186	-.096	.192
	Self-Ratings	Proficiency	240	-.015	.816
		Frequency	240	-.142	.028
		Can Do	240	-.115	.076
	Supervisor Ratings	Proficiency	116	-.017	.853
		Frequency	115	-.07	.459
		Confidence	115	-.15	.110
		Can Do	110	-.067	.489
Shift Conversation	Standardized Measure	BEST Plus	264	-.093	.132
	Self-Ratings	Proficiency	311	.025	.663
		Frequency	311	.049	.385
		Can Do	311	-.016	.772
	Supervisor Ratings	Proficiency	88	-.005	.963
		Frequency	89	.036	.735
		Confidence	89	-.107	.318
		Can Do	86	.092	.400
Shift Writing	Self-Ratings	Proficiency	119	-.299	.001
		Frequency	119	-.129	.161
		Can Write	117	-.147	.114
	Supervisor Ratings	Proficiency	22	.068	.763
		Frequency	22	.112	.620
		Confidence	22	.037	.872
		Can Write	18	.196	.436
All courses	Standardized Measure	BEST Plus	453	-.115	.014
	Self-Ratings	Proficiency	670	-.097	.012
		Frequency	670	-.095	.014
		Can Do	554	-.08	.061
	Supervisor Ratings	Proficiency	226	-.033	.623
		Frequency	226	-.039	.564
		Confidence	226	-.143	.031
		Can Do	199	-.031	.66

Table 7. Relationship between Age of Arrival and Change on standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.288	0.095		44.936	<.001
	BEST Plus (baseline)	0.756	0.047	0.805	16.085	<.001
	Age of Arrival	-0.007	0.016	-0.022	-0.435	0.664
	BEST x Age	0.009	0.008	0.056	1.116	0.266
Shift Conversation	(Constant)	5.667	0.092		61.726	<.001
	BEST Plus (baseline)	0.724	0.06	0.69	12.112	<.001
	Age of Arrival	-0.019	0.015	-0.075	-1.31	0.192
	BEST x Age	0.03	0.009	0.195	3.429	0.001

Table 8. Relationship between Age of Arrival and Change on self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.761	0.039		70.827	<.001
	Self-report Profic.	0.617	0.061	0.65	10.131	<.001
	Age of Arrival	0.006	0.007	0.056	0.879	0.381
	Profic. x Age	-0.006	0.009	-0.039	-0.61	0.543
Shift Conversation	(Constant)	3.15	0.039		80.086	<.001
	Self-report Profic.	0.484	0.065	0.502	7.499	<.001
	Age of Arrival	0.002	0.006	0.024	0.354	0.724
	Profic. x Age	0.009	0.009	0.071	1.05	0.295
Shift Writing	(Constant)	3.527	0.05		71.099	<.001
	Self-report Profic.	0.707	0.08	0.711	8.853	<.001
	Age of Arrival	-0.008	0.009	-0.092	-0.951	0.344
	Profic. x Age	0.006	0.013	0.048	0.509	0.612

Table 9. Relationship between Age of Arrival and Change on supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.133	0.126		24.957	<.001
	Sup-report Profic.	0.105	0.076	0.21	1.392	0.171
	Age of Arrival	0.025	0.024	0.158	1.006	0.32
	Profic. x Age	-0.023	0.031	-0.121	-0.745	0.46
Shift Conversation	(Constant)	3.721	0.124		29.966	<.001
	Sup-report Profic.	0.007	0.127	0.012	0.055	0.958
	Age of Arrival	0.012	0.013	0.321	0.918	0.394
	Profic. x Age	-0.043	0.014	-1.096	-3.144	0.02
Shift Writing	(Constant)	4.301	0.103		41.595	0.001
	Sup-report Profic.	0.381	0.172	0.556	2.209	0.158
	Age of Arrival	-0.004	0.045	-0.026	-0.087	0.939
	Profic. x Age	0.094	0.059	0.528	1.601	0.251

Table 10. Relationship between Age of Arrival and Change on self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.196	0.049		64.633	<.001
	Self-report Freq.	0.697	0.053	0.738	13.126	<.001
	Age of Arrival	-0.006	0.009	-0.038	-0.681	0.497
	Freq. x Age	-0.002	0.009	-0.015	-0.277	0.782
Shift Conversation	(Constant)	3.728	0.047		78.618	<.001
	Self-report Freq.	0.63	0.054	0.674	11.689	<.001
	Age of Arrival	0.001	0.008	0.006	0.102	0.919
	Freq. x Age	-0.001	0.008	-0.008	-0.131	0.896
Shift Writing	(Constant)	4.057	0.052		77.864	<.001
	Self-report Freq.	0.669	0.065	0.769	10.338	<.001
	Age of Arrival	0.0	0.008	-0.007	-0.085	0.933
	Freq. x Age	-0.004	0.011	-0.028	-0.354	0.725

Table 11. Relationship between Age of Arrival and Change on supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.289	0.112		29.455	<.001
	Sup-report Freq.	0.471	0.159	0.462	2.967	0.005
	Age of Arrival	0.002	0.02	0.011	0.079	0.937
	Freq. x Age	0.001	0.032	0.006	0.042	0.967
Shift Conversation	(Constant)	3.702	0.211		17.516	<.001
	Sup-report Freq.	0.359	0.209	0.498	1.712	0.138
	Age of Arrival	-0.028	0.017	-0.488	-1.592	0.163
	Freq. x Age	-0.004	0.021	-0.056	-0.183	0.861
Shift Writing	(Constant)	3.796	0.273		13.915	0.005
	Sup-report Freq.	0.683	0.308	0.824	2.218	0.157
	Age of Arrival	-0.063	0.082	-0.292	-0.778	0.518
	Freq. x Age	-0.078	0.124	-0.236	-0.631	0.593

Table 12. Relationship between Age of Arrival and Change on self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.365	0.047		72.06	<.001
	Work – Can Do	0.66	0.052	0.736	12.722	<.001
	Age of Arrival	0.003	0.008	0.021	0.36	0.719
	Can Do x Age	0.006	0.009	0.042	0.741	0.46
Shift Conversation	(Constant)	3.992	0.043		92.383	<.001
	Work – Can Do	0.363	0.054	0.453	6.725	<.001
	Age of Arrival	-0.006	0.007	-0.057	-0.844	0.4
	Can Do x Age	0.014	0.008	0.109	1.614	0.108

Table 13. Relationship between Age of Arrival and Change on supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.572	0.117		30.594	<.001
	Work – Can Do	0.68	0.143	0.614	4.764	<.001
	Age of Arrival	0.007	0.021	0.043	0.348	0.73
	Can Do x Age	0.011	0.026	0.055	0.43	0.669
Shift Conversation	(Constant)	3.959	0.162		24.48	<.001
	Work – Can Do	0.098	0.142	0.214	0.69	0.513
	Age of Arrival	-0.007	0.013	-0.17	-0.493	0.637
	Can Do x Age	-0.018	0.013	-0.49	-1.412	0.201

Table 14. Relationship between Age of Arrival and Change on self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.357	0.084		63.746	<.001
	Work – Can Write	0.445	0.092	0.497	4.825	<.001
	Age of Arrival	0.007	0.013	0.051	0.49	0.625
	Can Write x Age	-0.005	0.013	-0.042	-0.405	0.687

Table 15. Relationship between Age of Arrival and Change on supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.247	0.172		30.559	0.001
	Work – Can Write	0.369	0.134	0.703	2.746	0.111
	Age of Arrival	-0.142	0.059	-0.653	-2.4	0.138
	Can Write x Age	0.013	0.056	0.062	0.228	0.841

Table 16. Relationship between Age of Arrival and Change on supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.15	0.143		22.097	<.001
	Sup-report Conf.	0.397	0.164	0.358	2.424	0.02
	Age of Arrival	0.004	0.026	0.025	0.172	0.864
	Conf. x Age	-0.021	0.032	-0.097	-0.675	0.503
Shift Conversation	(Constant)	3.666	0.206		17.808	<.001
	Sup-report Conf.	0.182	0.178	0.243	1.022	0.346
	Age of Arrival	-0.043	0.017	-0.655	-2.543	0.044
	Conf. x Age	-0.016	0.017	-0.234	-0.908	0.399
Shift Writing	(Constant)	4.187	0.135		30.91	0.001
	Sup-report Conf.	0.42	0.118	0.772	3.567	0.07
	Age of Arrival	-0.047	0.044	-0.187	-1.072	0.396
	Conf. x Age	0.041	0.035	0.251	1.158	0.366

Table 17. Correlations between Integrative Orientation and Baseline Measures of English Proficiency

EUA Course	Measurement Category	Proficiency Measure	n	r	p
Shift Basics	Standardized Measure	BEST Plus	186	.063	.39
		Proficiency	244	.123	.054
	Self-Ratings	Frequency	244	.027	.673
		Can Do	244	.042	.509
	Supervisor Ratings	Proficiency	120	.082	.371
		Frequency	119	.213	.02
		Confidence	119	.099	.287
		Can Do	114	.182	.053
Shift Conversation	Standardized Measure	BEST Plus	266	.009	.889
		Proficiency	316	.009	.871
	Self-Ratings	Frequency	316	.150	.007
		Can Do	316	.125	.027
	Supervisor Ratings	Proficiency	89	.076	.482
		Frequency	90	.067	.528
		Confidence	90	.111	.297
		Can Do	87	.16	.138
Shift Writing	Self-Ratings	Proficiency	124	.003	.977
		Frequency	124	.116	.198
		Can Write	122	.037	.689
	Supervisor Ratings	Proficiency	22	.131	.56
		Frequency	22	.376	.085
		Confidence	22	.293	.186
All courses	Standardized Measure	BEST Plus	455	-.026	.582
		Proficiency	684	.033	.39
	Self-Ratings	Frequency	684	.082	.031
		Can Do	563	.062	.141
	Supervisor Ratings	Proficiency	231	.062	.351
		Frequency	231	.131	.047
		Confidence	231	.094	.156
		Can Do	204	.137	.051

Table 18. Correlations between baseline Integrative Orientation and course attendance

EUA Course	n	r	p
Shift Basics	243	.102	.112
Shift Conversation	308	.005	.93
Shift Writing	124	-.076	.401

Table 19. Logistic regression of baseline Integrative Orientation and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Integrative	0.393	0.204	3.686	1	0.055	1.481
	(Constant)	0.958	0.731	1.715	1	0.19	2.606
Shift Conversation	Integrative	-0.089	0.132	0.457	1	0.499	0.914
	(Constant)	1.973	0.509	14.995	1	<.001	7.189
Shift Writing	Integrative	-0.252	0.202	1.559	1	0.212	0.777
	(Constant)	2.139	0.809	6.997	1	0.008	8.493

Table 20. Correlations between baseline Instrumental Orientation (Workplace) and baseline Instrumental Orientation (Family)

EUA Course	n	r	p
Shift Basics	229	.399	<.001
Shift Conversation	236	.522	<.001
Shift Writing	124	.422	<.001

Table 21. Structural Equation Model for Instrumental Orientation (6-items) using Confirmatory Factor Analyses

EUA Course	Model	χ^2	df	GFI	RMSEA	SRMR	CFI	NNFI
Shift Basics	Two-factor	18.289	8	0.969	0.0818	0.0522	0.925	0.86
	One-factor	18.196	9	0.969	0.0729	0.052	0.932	0.886
Shift Conversation	Two-factor	26.844	8	0.959	0.107	0.0559	0.938	0.883
	One-factor	26.74	9	0.959	0.0979	0.0559	0.941	0.902
Shift Writing	Two-factor	13.831	8	0.959	0.0825	0.06	0.928	0.865
	One-factor	17.271	9	0.949	0.0927	0.067	0.911	0.852

Table 22. Paired-samples t-tests between Integrative Orientation and Instrumental Orientation

EUA Course	Pairs	X	n	t	p
Shift Basics	Integrative orientation Instrumental orientation - Workplace	3.7582 4.5	244	-11.378	<.001
	Integrative orientation Instrumental orientation - Family	3.7249 4.7227	229	-15.292	<.001
	Integrative orientation Instrumental orientation	3.7582 4.61	244	-13.717	<.001
Shift Conversation	Integrative orientation Instrumental orientation - Workplace	3.5897 4.6264	316	-13.542	<.001
	Integrative orientation Instrumental orientation - Family	3.6879 4.6935	236	-14.309	<.001
	Integrative orientation Instrumental orientation	3.5897 4.5938	316	-15.1	<.001
Shift Writing	Integrative orientation Instrumental orientation - Workplace	3.6949 4.25	124	-5.095	<.001
	Integrative orientation Instrumental orientation - Family	3.6949 4.6008	124	-9.212	<.001
	Integrative orientation Instrumental orientation	3.6949 4.423	124	-7.514	<.001

Table 23. Correlations between baseline Instrumental Orientation - Workplace and course attendance

EUA Course	n	r	p
Shift Basics	243	.022	.728
Shift Conversation	311	-.005	.923
Shift Writing	124	.113	.213

Table 24. Correlations between baseline Instrumental Orientation - Family and course attendance

EUA Course	n	r	p
Shift Basics	228	.027	.685
Shift Conversation	228	-.022	.739
Shift Writing	124	-.052	.566

Table 25. Correlations between baseline Instrumental Orientation - Combined and course attendance

EUA Course	n	r	p
Shift Basics	243	.014	.829
Shift Conversation	311	.01	.86
Shift Writing	124	.049	.59

Table 26. Logistic regression of baseline Instrumental Orientation-Workplace and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Inst-Work	0.406	0.36	1.273	1	0.259	1.5
	(Constant)	0.56	1.592	0.124	1	0.725	1.751
Shift Conversation	Inst-Work	-0.114	0.256	0.2	1	0.655	0.892
	(Constant)	2.178	1.175	3.439	1	0.064	8.829
Shift Writing	Inst-Work	0.201	0.231	0.754	1	0.385	1.222
	(Constant)	0.341	0.988	0.119	1	0.73	1.407

Table 27. Logistic regression of baseline Instrumental Orientation-Family and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Inst-Fam	-0.136	0.542	0.063	1	0.802	0.873
	(Constant)	3.105	2.587	1.44	1	0.23	22.314
Shift Conversation	Inst-Fam	-0.218	0.336	0.423	1	0.515	0.804
	(Constant)	2.503	1.598	2.453	1	0.117	12.218
Shift Writing	Inst-Fam	-0.027	0.336	0.007	1	0.935	0.973
	(Constant)	1.312	1.564	0.704	1	0.402	3.715

Table 28. Logistic regression of baseline Instrumental Orientation and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Instrumen	0.304	0.46	0.438	1	0.508	1.356
	(Constant)	0.967	2.108	0.211	1	0.646	2.631
Shift Conversation	Instrumen	-0.288	0.313	0.848	1	0.357	0.75
	(Constant)	2.991	1.462	4.185	1	0.041	19.899
Shift Writing	Instrumen	0.169	0.319	0.28	1	0.596	1.184
	(Constant)	0.442	1.417	0.097	1	0.755	1.555

Table 29. Correlations between baseline Instrumental Orientation - Workplace (Transformed) and course attendance

EUA Course	n	r	P
Shift Basics	243	.023	.726
Shift Conversation	311	.002	.968
Shift Writing	124	.134	.139

Table 30. Correlations between baseline Instrumental Orientation - Family (Transformed) and course attendance

EUA Course	n	r	p
Shift Basics	228	.032	.626
Shift Conversation	228	-.023	.729
Shift Writing	124	-.054	.552

Table 31. Correlations between baseline Instrumental Orientation (Transformed) and course attendance

EUA Course	n	r	p
Shift Basics	243	.018	.776
Shift Conversation	310	.017	.763
Shift Writing	124	.058	.52

Table 32. Correlations between baseline Ideal Language Self and course attendance

EUA Course	n	r	p
Shift Basics	242	.008	.901
Shift Conversation	309	.002	.974
Shift Writing	123	.184	.041

Table 33. Logistic regression of baseline Ideal Language Self and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Ideal Lang	0.222	0.235	0.893	1	0.345	1.248
	(Constant)	1.392	1.087	1.64	1	0.2	4.022
Shift Conversation	Ideal Lang	-0.036	0.164	0.049	1	0.824	0.964
	(Constant)	1.819	0.77	5.579	1	0.018	6.165
Shift Writing	Ideal Lang	0.174	0.143	1.476	1	0.224	1.19
	(Constant)	0.472	0.607	0.604	1	0.437	1.603

Table 34. Correlations between baseline Ideal Language Self and course attendance

EUA Course	n	r	p
Shift Basics	241	-.056	.389
Shift Conversation	315	-.018	.757
Shift Writing	124	-.084	.353

Table 35. Correlations between baseline Linguistic Self-Confidence and Baseline Measures of English Usage

EUA Course	Measurement Category	Proficiency Measure	n	r	P
Shift Basics	Standardized Measure	BEST Plus	186	.159	.03
		Proficiency	244	.219	.001
	Self-Ratings	Frequency	244	.250	<.001
		Can Do	244	.267	<.001
	Supervisor Ratings	Proficiency	120	.12	.19
		Frequency	119	.313	.001
		Confidence	119	.254	.005
		Can Do	114	.199	.033
Shift Conversation	Standardized Measure	BEST Plus	269	.167	.006
		Proficiency	319	.197	<.001
	Self-Ratings	Frequency	319	.283	<.001
		Can Do	319	.286	<.001
	Supervisor Ratings	Proficiency	90	.018	.864
		Frequency	91	.128	.228
		Confidence	91	.03	.779
		Can Do	88	.145	.178
Shift Writing	Self-Ratings	Proficiency	124	.09	.318
		Frequency	124	.294	.001
		Can Write	122	.106	.246
	Supervisor Ratings	Proficiency	22	-.201	.371
		Frequency	22	-.334	.129
		Confidence	22	-.471	.027
All courses	Standardized Measure	BEST Plus	458	.194	<.001
		Proficiency	687	.226	<.001
	Self-Ratings	Frequency	687	.302	<.001
		Can Do	566	.288	<.001
	Supervisor Ratings	Proficiency	232	.095	.148
		Frequency	232	.219	.001
		Confidence	232	.136	.038
		Can Do	205	.196	.005

Table 36. Relationship between Linguistic Self-Confidence and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.285	0.097		44.353	<.001
	BEST Plus (baseline)	0.777	0.048	0.818	16.165	<.001
	Linguistic Self-Con	-0.02	0.164	-0.006	-0.124	0.902
	BEST x Self-Co	0.015	0.084	0.009	0.176	0.86
Shift Conversation	(Constant)	5.628	0.094		59.812	<.001
	BEST Plus (baseline)	0.728	0.062	0.7	11.756	<.001
	Linguistic Self-Con	0.169	0.164	0.061	1.032	0.304
	BEST x Self-Co	0.107	0.109	0.058	0.985	0.326

Table 37. Relationship between Linguistic Self-Confidence and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.763	0.04		69.507	<.001
	Self-report Profic.	0.602	0.064	0.644	9.385	<.001
	Linguistic Self-Con	0.036	0.07	0.035	0.52	0.604
	Profic. X Self-Co	0.018	0.102	0.012	0.181	0.856
Shift Conversation	(Constant)	3.157	0.039		81.037	<.001
	Self-report Profic.	0.471	0.064	0.488	7.322	<.001
	Linguistic Self-Con	0.122	0.067	0.122	1.829	0.069
	Profic. x Self-Co	-0.097	0.104	-0.062	-0.935	0.351
Shift Writing	(Constant)	3.51	0.048		73.412	<.001
	Self-report Profic.	0.691	0.084	0.686	8.225	<.001
	Linguistic Self-Con	0.162	0.112	0.115	1.45	0.151
	Profic. x Self-Co	0.225	0.239	0.079	0.939	0.351

Table 38. Relationship between Linguistic Self-Confidence and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.117	0.117		26.728	<.001
	Sup-report Profic.	0.015	0.078	0.031	0.198	0.844
	Linguistic Self-Con	0.377	0.199	0.261	1.895	0.065
	Profic. X Self-Co	0.593	0.319	0.292	1.858	0.07
Shift Conversation	(Constant)	3.706	0.246		15.046	<.001
	Sup-report Profic.	-0.075	0.24	-0.126	-0.314	0.764
	Linguistic Self-Con	-0.155	0.277	-0.253	-0.559	0.597
	Profic. x Self-Co	-0.328	0.435	-0.333	-0.755	0.479
Shift Writing	(Constant)	4.234	0.185		22.831	0.002
	Sup-report Profic.	0.504	0.307	0.737	1.644	0.242
	Linguistic Self-Con	-0.039	0.423	-0.041	-0.093	0.935
	Profic. x Self-Co	0.323	0.79	0.202	0.41	0.722

Table 39. Relationship between Linguistic Self-Confidence and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.187	0.052		61.652	<.001
	Self-report Freq.	0.633	0.058	0.688	10.88	<.001
	Linguistic Self-Con	0.072	0.091	0.049	0.793	0.429
	Freq. x Self-Co	0.129	0.1	0.079	1.29	0.199
Shift Conversation	(Constant)	3.728	0.047		78.711	<.001
	Self-report Freq.	0.593	0.054	0.634	10.963	<.001
	Linguistic Self-Con	0.219	0.082	0.156	2.657	0.009
	Freq. x Self-Co	-0.035	0.086	-0.023	-0.404	0.686
Shift Writing	(Constant)	4.077	0.053		76.934	<.001
	Self-report Freq.	0.663	0.066	0.75	10.031	<.001
	Linguistic Self-Con	0.042	0.123	0.026	0.34	0.735
	Freq. x Self-Co	-0.004	0.141	-0.002	-0.026	0.98

Table 40. Relationship between Linguistic Self-Confidence and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.333	0.111		29.998	<.001
	Sup-report Freq.	0.562	0.152	0.534	3.693	0.001
	Linguistic Self-Con	-0.155	0.197	-0.111	-0.79	0.434
	Freq. x Self-Co	-0.322	0.296	-0.154	-1.089	0.282
Shift Conversation	(Constant)	3.736	0.319		11.727	<.001
	Sup-report Freq.	0.277	0.321	0.385	0.863	0.421
	Linguistic Self-Con	0.351	0.331	0.386	1.062	0.329
	Freq. x Self-Co	0.126	0.451	0.115	0.279	0.79
Shift Writing	(Constant)	3.635	0.212		17.178	0.003
	Sup-report Freq.	0.626	0.238	0.755	2.629	0.119
	Linguistic Self-Con	-0.321	0.495	-0.233	-0.648	0.583
	Freq. x Self-Co	1.051	0.586	0.63	1.793	0.215

Table 41. Relationship between Linguistic Self-Confidence and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.368	0.047		72.246	<.001
	Work – Can Do	0.633	0.053	0.713	11.889	<.001
	Linguistic Self-Conf	0.089	0.084	0.065	1.059	0.291
	Can Do x Self-Co	0.031	0.084	0.022	0.37	0.712
Shift Conversation	(Constant)	3.975	0.044		91.1	<.001
	Work – Can Do	0.349	0.056	0.437	6.28	<.001
	Linguistic Self-Conf	0.19	0.078	0.172	2.421	0.017
	Can Do x Self-Co	0.08	0.077	0.073	1.04	0.3

Table 42. Relationship between Linguistic Self-Confidence and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.586	0.118		30.518	<.001
	Work – Can Do	0.582	0.139	0.551	4.186	<.001
	Linguistic Self-Conf	-0.004	0.209	-0.003	-0.019	0.985
	Can Do x Self-Co	-0.083	0.238	-0.046	-0.347	0.73
Shift Conversation	(Constant)	3.952	0.211		18.775	<.001
	Work – Can Do	0.103	0.175	0.226	0.59	0.574
	Linguistic Self-Conf	-0.251	0.228	-0.408	-1.097	0.309
	Can Do x Self-Co	-0.32	0.258	-0.404	-1.238	0.256

Table 43. Relationship between Linguistic Self-Confidence and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.371	0.081		65.93	<.001
	Work – Can Write	0.43	0.09	0.48	4.8	<.001
	Linguistic Self-Conf	0.107	0.184	0.058	0.58	0.563
	Can Write x Self-Co	-0.017	0.22	-0.008	-0.079	0.937

Table 44. Relationship between Linguistic Self-Confidence and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	4.942	0.088		55.861	<.001
	Work – Can Write	0.345	0.071	0.659	4.833	0.04
	Linguistic Self-Conf	-0.724	0.195	-0.525	-3.713	0.065
	Can Write x Self-Co	0.968	0.189	0.711	5.136	0.036

Table 45. Relationship between Linguistic Self-Confidence and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.164	0.142		22.318	<.001
	Sup-report Conf.	0.371	0.167	0.336	2.222	0.031
	Linguistic Self-Con	-0.012	0.251	-0.007	-0.048	0.962
	Conf. x Self-Co	0.178	0.271	0.095	0.657	0.515
Shift Conversation	(Constant)	3.781	0.507		7.455	<.001
	Sup-report Conf.	0.052	0.438	0.07	0.12	0.909
	Linguistic Self-Con	0.053	0.475	0.051	0.112	0.914
	Conf. x Self-Co	-0.266	0.59	-0.233	-0.45	0.668
Shift Writing	(Constant)	4.077	0.093		43.755	0.001
	Sup-report Conf.	0.544	0.069	0.999	7.854	0.016
	Linguistic Self-Con	-0.413	0.205	-0.26	-2.015	0.181
	Conf. x Self-Co	0.309	0.137	0.297	2.253	0.153

Table 46. Paired-samples t-tests between baseline and end of program Linguistic Self-Confidence

EUA Course	Pairs	X	n	t	p
Shift Basics	Linguistic Self-Confidence Baseline	4.4966	147	.674	.501
	Linguistic Self-Conf. End of Program	4.4592			
Shift Conversation	Linguistic Self-Confidence Baseline	4.5365	178	.432	.666
	Linguistic Self-Conf. End of Program	4.5197			
Shift Writing	Linguistic Self-Confidence Baseline	4.7078	77	-.402	.689
	Linguistic Self-Conf. End of Program	4.7338			

Table 47. Correlations between baseline Linguistic Self-Confidence and course attendance

EUA Course	n	r	p
Shift Basics	243	.155	.016
Shift Conversation	311	.032	.58
Shift Writing	124	.059	.516

Table 48. Logistic regression of baseline Linguistic Self-Confidence and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Self-Conf	0.601	0.327	3.377	1	0.066	1.823
	(Constant)	-0.225	1.392	0.026	1	0.872	0.799
Shift Conversation	Self-Conf	-0.11	0.273	0.163	1	0.686	0.896
	(Constant)	2.157	1.246	2.997	1	0.083	8.646
Shift Writing	Self-Conf	0.723	0.4	3.259	1	0.071	2.06
	(Constant)	-2.154	1.848	1.358	1	0.244	0.116

Table 49. Correlations between baseline Linguistic Anxiety and Baseline Measures of English Usage

EUA Course	Measurement Category	Proficiency Measure	n	r	p
Shift Basics	Standardized Measure	BEST Plus	184	-.138	.062
		Proficiency	241	-.215	.001
	Self-Ratings	Frequency	241	-.159	.013
		Can Do	241	-.218	.001
	Supervisor Ratings	Proficiency	119	-.142	.124
		Frequency	118	-.203	.028
		Confidence	118	-.240	.009
		Can Do	113	-.236	.012
Shift Conversation	Standardized Measure	BEST Plus	265	-.237	<.001
		Proficiency	315	-.182	.001
	Self-Ratings	Frequency	315	-.154	.006
		Can Do	315	-.191	.001
	Supervisor Ratings	Proficiency	90	-.028	.796
		Frequency	91	-.078	.463
		Confidence	91	-.043	.689
		Can Do	88	-.073	.502
Shift Writing	Self-Ratings	Proficiency	124	-.321	<.001
		Frequency	124	.012	.891
		Can Write	122	-.142	.12
	Supervisor Ratings	Proficiency	22	-.045	.843
		Frequency	22	-.206	.358
		Confidence	22	-.265	.234
All courses	Standardized Measure	BEST Plus	452	-.227	<.001
		Proficiency	680	-.270	<.001
	Self-Ratings	Frequency	680	-.176	<.001
		Can Do	559	-.224	<.001
	Supervisor Ratings	Proficiency	231	-.107	.104
		Frequency	231	-.165	.012
		Confidence	231	-.177	.007
		Can Do	204	-.169	.016

Table 50. Paired-samples t-tests between baseline and end of program Linguistic Anxiety

EUA Course	Pairs	X	n	t	P
Shift Basics	Linguistic Anxiety Baseline	3.6897	145	3.117	.002
	Linguistic Anxiety End of Program	3.3655			
Shift Conversation	Linguistic Anxiety Baseline	3.3943	175	2.587	.011
	Linguistic Anxiety End of Program	3.0857			
Shift Writing	Linguistic Anxiety Baseline	3.1333	75	2.487	.015
	Linguistic Anxiety End of Program	2.6533			

Table 51. Relationship between Change in Linguistic Anxiety and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.121	0.106		38.866	<.001
	BEST Plus (baseline)	0.759	0.051	0.822	14.743	<.001
	Change in Anxiety	-0.054	0.083	-0.036	-0.643	0.522
	BEST x Chg Anx	0.027	0.039	0.038	0.682	0.496
Shift Conversation	(Constant)	5.626	0.09		62.738	<.001
	BEST Plus (baseline)	0.728	0.061	0.718	11.999	<.001
	Change in Anxiety	-0.05	0.056	-0.054	-0.908	0.365
	BEST x Chg Anx	0.016	0.044	0.021	0.352	0.725

Table 52. Relationship between Change in Linguistic Anxiety and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.774	0.039		70.973	<.001
	Self-report Profic.	0.61	0.061	0.652	10.046	<.001
	Change in Anxiety	-0.018	0.031	-0.037	-0.564	0.573
	Profic. X Chg Anx	-0.014	0.04	-0.023	-0.345	0.731
Shift Conversation	(Constant)	3.159	0.04		79.352	<.001
	Self-report Profic.	0.482	0.066	0.498	7.264	<.001
	Change in Anxiety	-0.024	0.026	-0.063	-0.904	0.367
	Profic. X Chg Anx	-0.04	0.049	-0.056	-0.808	0.42
Shift Writing	(Constant)	3.521	0.048		73.035	<.001
	Self-report Profic.	0.794	0.08	0.764	9.964	<.001
	Change in Anxiety	-0.06	0.029	-0.159	-2.061	0.043
	Profic. X Chg Anx	0.014	0.037	0.029	0.37	0.713

Table 53. Relationship between Change in Linguistic Anxiety and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.124	0.111		28.216	<.001
	Sup-report Profic.	0.686	0.166	0.579	4.142	<.001
	Change in Anxiety	0.152	0.12	0.187	1.269	0.211
	Profic. X Chg Anx	0.14	0.132	0.165	1.061	0.295
Shift Conversation	(Constant)	3.686	0.258		14.279	<.001
	Sup-report Profic.	-0.058	0.226	-0.097	-0.257	0.806
	Change in Anxiety	0.113	0.122	0.478	0.922	0.392
	Profic. X Chg Anx	-0.242	0.218	-0.563	-1.112	0.309
Shift Writing	(Constant)	4.297	0.25		17.193	0.003
	Sup-report Profic.	0.691	0.374	1.009	1.849	0.206
	Change in Anxiety	0.054	0.181	0.17	0.299	0.793
	Profic. X Chg Anx	0.157	0.331	0.343	0.475	0.682

Table 54. Relationship between Change in Linguistic Anxiety and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.225	0.049		65.89	<.001
	Self-report Freq.	0.672	0.054	0.736	12.393	<.001
	Change in Anxiety	-0.032	0.039	-0.048	-0.818	0.415
	Freq. x Chg Anx	0.085	0.046	0.111	1.857	0.065
Shift Conversation	(Constant)	3.728	0.047		78.916	<.001
	Self-report Freq.	0.631	0.053	0.677	11.815	<.001
	Change in Anxiety	-0.002	0.03	-0.003	-0.057	0.955
	Freq. x Chg Anx	-0.038	0.034	-0.064	-1.113	0.267
Shift Writing	(Constant)	4.093	0.054		76.321	<.001
	Self-report Freq.	0.634	0.068	0.738	9.334	<.001
	Change in Anxiety	-0.03	0.033	-0.07	-0.926	0.358
	Freq. x Chg Anx	0.04	0.04	0.079	1.006	0.318

Table 55. Relationship between Change in Linguistic Anxiety and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.36	0.113		29.792	<.001
	Sup-report Freq.	0.431	0.146	0.403	2.948	0.005
	Change in Anxiety	0.122	0.111	0.154	1.099	0.278
	Freq. x Chg Anx	-0.211	0.14	-0.21	-1.511	0.138
Shift Conversation	(Constant)	3.723	0.286		13.015	<.001
	Sup-report Freq.	0.248	0.251	0.345	0.989	0.361
	Change in Anxiety	-0.018	0.12	-0.052	-0.153	0.883
	Freq. x Chg Anx	0.148	0.114	0.447	1.298	0.242
Shift Writing	(Constant)	3.435	0.2		17.169	0.003
	Sup-report Freq.	1.212	0.224	1.461	5.404	0.033
	Change in Anxiety	-0.108	0.093	-0.235	-1.161	0.365
	Freq. x Chg Anx	0.495	0.137	0.941	3.621	0.069

Table 56. Relationship between Change in Linguistic Anxiety and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.383	0.045		74.948	<.001
	Work – Can Do	0.653	0.051	0.732	12.822	<.001
	Change in Anxiety	-0.029	0.036	-0.046	-0.809	0.42
	Can Do x Chg Anx	0.046	0.037	0.071	1.241	0.217
Shift Conversation	(Constant)	3.991	0.043		92.024	<.001
	Work – Can Do	0.371	0.054	0.467	6.902	<.001
	Change in Anxiety	-0.018	0.028	-0.045	-0.656	0.513
	Can Do x Chg Anx	0.013	0.034	0.027	0.39	0.697

Table 57. Relationship between Change in Linguistic Anxiety and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.543	0.127		27.99	<.001
	Work – Can Do	0.633	0.151	0.596	4.191	<.001
	Change in Anxiety	0.002	0.138	0.002	0.014	0.989
	Can Do x Chg Anx	0.19	0.148	0.203	1.291	0.204
Shift Conversation	(Constant)	3.964	0.252		15.752	<.001
	Work – Can Do	0.054	0.194	0.118	0.278	0.789
	Change in Anxiety	-0.008	0.096	-0.034	-0.08	0.938
	Can Do x Chg Anx	-0.043	0.123	-0.137	-0.35	0.737

Table 58. Relationship between Change in Linguistic Anxiety and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.382	0.089		60.439	<.001
	Work – Can Write	0.419	0.101	0.455	4.16	<.001
	Change in Anxiety	-0.025	0.054	-0.05	-0.464	0.644
	Can Write x Self-Co	0.06	0.07	0.094	0.859	0.393

Table 59. Relationship between Change in Linguistic Anxiety and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	4.62	0.265		17.46	0.003
	Work – Can Write	0.715	0.197	1.364	3.63	0.068
	Change in Anxiety	-0.241	0.129	-0.522	-1.863	0.204
	Can Write x Self-Co	0.283	0.131	0.755	2.162	0.163

Table 60. Relationship between Change in Linguistic Anxiety and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.235	0.141		22.924	<.001
	Sup-report Conf.	0.348	0.16	0.31	2.168	0.036
	Change in Anxiety	0.18	0.147	0.191	1.219	0.23
	Conf. x Chg Anx	-0.176	0.168	-0.165	-1.05	0.3
Shift Conversation	(Constant)	3.807	0.41		9.285	<.001
	Sup-report Conf.	0.071	0.317	0.095	0.224	0.83
	Change in Anxiety	-0.12	0.166	-0.299	-0.722	0.497
	Conf. x Chg Anx	0.077	0.138	0.233	0.559	0.597
Shift Writing	(Constant)	3.921	0.133		29.478	0.001
	Sup-report Conf.	0.72	0.106	1.322	6.78	0.021
	Change in Anxiety	-0.103	0.066	-0.195	-1.564	0.258
	Conf. x Chg Anx	0.126	0.053	0.456	2.376	0.141

Table 61. Correlations between baseline Linguistic Anxiety and course attendance

EUA Course	n	r	P
Shift Basics	240	.03	.645
Shift Conversation	307	.079	.168
Shift Writing	124	-.016	.859

Table 62. Logistic regression of baseline Linguistic Anxiety and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Anxiety	0.153	0.178	0.74	1	0.39	1.165
	(Constant)	1.799	0.663	7.359	1	0.007	6.041
Shift Conversation	Anxiety	0.114	0.116	0.966	1	0.326	1.121
	(Constant)	1.287	0.41	9.85	1	0.002	3.621
Shift Writing	Anxiety	0.042	0.145	0.084	1	0.772	1.043
	(Constant)	1.062	0.477	4.963	1	0.026	2.892

Table 63. Correlations between baseline Linguistic Self-Confidence and Anxiety (Combined) and Baseline Measures of English Usage

EUA Course	Measurement Category	Proficiency Measure	n	r	P
Shift Basics	Standardized Measure	BEST Plus	186	.195	.008
	Self-Ratings	Proficiency	244	.303	<.001
		Frequency	244	.300	<.001
		Can Do	244	.344	<.001
	Supervisor Ratings	Proficiency	120	.173	.058
		Frequency	119	.340	<.001
		Confidence	119	.324	<.001
		Can Do	114	.289	.002
Shift Conversation	Standardized Measure	BEST Plus	269	.278	<.001
	Self-Ratings	Proficiency	319	.259	<.001
		Frequency	319	.297	<.001
		Can Do	319	.336	<.001
	Supervisor Ratings	Proficiency	90	.039	.719
		Frequency	91	.135	.201
		Confidence	91	.055	.605
		Can Do	88	.14	.192
Shift Writing	Self-Ratings	Proficiency	124	.309	<.001
		Frequency	124	.13	.149
		Can Write	122	.161	.076
	Supervisor Ratings	Proficiency	22	-.086	.704
		Frequency	22	-.036	.874
		Confidence	22	-.072	.751
		Can Write	18	-.021	.934
All courses	Standardized Measure	BEST Plus	458	.283	<.001
	Self-Ratings	Proficiency	687	.339	<.001
		Frequency	687	.323	<.001
		Can Do	566	.360	<.001
	Supervisor Ratings	Proficiency	232	.137	.037
		Frequency	232	.253	<.001
		Confidence	232	.210	.001
		Can Do	205	.241	.001

Table 64. Paired-samples t-tests between baseline and end of program Linguistic Self-Confidence and Anxiety (Combined)

EUA Course	Pairs	X	n	t	P
Shift Basics	Linguistic Self-Conf/Anxiety Baseline	3.7664	147	-1.647	.102
	Ling. Self-Conf/Anx End of Program	3.8515			
Shift Conversation	Linguistic Self-Conf/Anxiety Baseline	3.8801	178	-2.39	.018
	Ling. Self-Conf/Anx End of Program	3.9916			
Shift Writing	Linguistic Self-Conf/Anxiety Baseline	4.0844	77	-2.46	.016
	Ling. Self-Conf/Anx End of Program	4.2835			

Table 65. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.28	0.097		44.163	<.001
	BEST Plus (baseline)	0.775	0.048	0.815	15.975	<.001
	Ling Conf/Anxiety	0.001	0.163	0	0.007	0.995
	BEST x Ling Con/Anx	0.032	0.074	0.021	0.429	0.668
Shift Conversation	(Constant)	5.648	0.095		59.318	<.001
	BEST Plus (baseline)	0.688	0.063	0.661	10.974	<.001
	Ling Conf/Anxiety	0.387	0.165	0.141	2.341	0.021
	BEST x Ling Con/Anx	-0.021	0.108	-0.011	-0.191	0.849

Table 66. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.77	0.04		69.434	<.001
	Self-report Profic.	0.613	0.063	0.656	9.683	<.001
	Ling Conf/Anxiety	0.015	0.064	0.016	0.235	0.815
	Prof. X Ling Con/Anx	-0.039	0.091	-0.028	-0.423	0.673
Shift Conversation	(Constant)	3.159	0.039		80.281	<.001
	Self-report Profic.	0.446	0.065	0.462	6.839	<.001
	Ling Conf/Anxiety	0.165	0.07	0.162	2.361	0.019
	Prof. X Ling Con/Anx	-0.048	0.1	-0.032	-0.486	0.628
Shift Writing	(Constant)	3.529	0.049		72.437	<.001
	Self-report Profic.	0.741	0.08	0.736	9.245	<.001
	Ling Conf/Anxiety	-0.008	0.081	-0.008	-0.099	0.921
	Prof. X Ling Con/Anx	-0.009	0.129	-0.005	-0.068	0.946

Table 67. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.182	0.124		25.715	<.001
	Sup-report Profic.	0.077	0.106	0.156	0.732	0.468
	Ling Conf/Anxiety	0.517	0.192	0.404	2.692	0.01
	Prof. X Ling Con/Anx	-0.078	0.309	-0.057	-0.254	0.801
Shift Conversation	(Constant)	3.76	0.271		13.899	<.001
	Sup-report Profic.	-0.144	0.292	-0.242	-0.495	0.639
	Ling Conf/Anxiety	0.021	0.476	0.029	0.044	0.966
	Prof. X Ling Con/Anx	-0.204	0.483	-0.296	-0.422	0.687
Shift Writing	(Constant)	4.302	0.225		19.152	0.003
	Sup-report Profic.	0.574	0.304	0.839	1.892	0.199
	Ling Conf/Anxiety	-0.022	0.294	-0.037	-0.076	0.947
	Prof. X Ling Con/Anx	-0.161	0.622	-0.115	-0.259	0.82

Table 68. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.183	0.051		62.261	<.001
	Self-report Freq.	0.649	0.057	0.705	11.443	<.001
	Ling Conf/Anxiety	-0.018	0.083	-0.013	-0.216	0.83
	Freq. x Ling Con/Anx	0.165	0.089	0.108	1.851	0.066
Shift Conversation	(Constant)	3.74	0.048		78.432	<.001
	Self-report Freq.	0.579	0.055	0.619	10.516	<.001
	Ling Conf/Anxiety	0.229	0.084	0.16	2.724	0.007
	Freq. x Ling Con/Anx	-0.104	0.087	-0.067	-1.19	0.236
Shift Writing	(Constant)	4.077	0.052		79.167	<.001
	Self-report Freq.	0.666	0.066	0.754	10.136	<.001
	Ling Conf/Anxiety	0.046	0.086	0.04	0.536	0.593
	Freq. x Ling Con/Anx	0.005	0.117	0.004	0.047	0.963

Table 69. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	B	t	p
Shift Basics	(Constant)	3.372	0.116		29.122	<.001
	Sup-report Freq.	0.526	0.156	0.5	3.373	0.002
	Ling Conf/Anxiety	0.069	0.179	0.056	0.387	0.701
	Freq. x Ling Con/Anx	-0.371	0.239	-0.211	-1.55	0.128
Shift Conversation	(Constant)	3.641	0.261		13.935	<.001
	Sup-report Freq.	0.396	0.305	0.55	1.3	0.241
	Ling Conf/Anxiety	0.339	0.539	0.315	0.629	0.552
	Freq. x Ling Con/Anx	0.211	0.46	0.253	0.459	0.663
Shift Writing	(Constant)	3.517	0.282		12.485	0.006
	Sup-report Freq.	0.627	0.28	0.755	2.242	0.154
	Ling Conf/Anxiety	-0.186	0.406	-0.212	-0.458	0.692
	Freq. x Ling Con/Anx	0.756	0.465	0.653	1.627	0.245

Table 70. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.366	0.047		72.154	<.001
	Work – Can Do	0.63	0.054	0.71	11.579	<.001
	LingConf/Anxiety	0.03	0.076	0.024	0.399	0.69
	CanDo x LingConf/Anx	0.072	0.073	0.058	0.983	0.327
Shift Conversation	(Constant)	3.986	0.043		91.922	<.001
	Work – Can Do	0.318	0.055	0.397	5.739	<.001
	LingConf/Anxiety	0.257	0.077	0.229	3.336	0.001
	Can Do x LingConf/Anx	0.007	0.084	0.006	0.087	0.931

Table 71. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.582	0.131		27.368	0
	Work – Can Do	0.584	0.158	0.552	3.7	0.001
	LingConf/Anxiety	0.003	0.223	0.002	0.013	0.989
	Can Do x LingConf/Anx	-0.009	0.255	-0.005	-0.035	0.972
Shift Conversation	(Constant)	3.946	0.228		17.342	0
	Work – Can Do	0.056	0.204	0.122	0.273	0.793
	LingConf/Anxiety	-0.062	0.386	-0.088	-0.16	0.877
	Can Do x LingConf/Anx	0.003	0.371	0.005	0.008	0.994

Table 72. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.388	0.08		67.229	<.001
	Work – Can Write	0.461	0.091	0.514	5.062	<.001
	LingConf/Anxiety	0.041	0.131	0.031	0.315	0.753
	Can Wr x LingConf/Anx	-0.18	0.15	-0.121	-1.2	0.234

Table 73. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	4.571	0.209		21.835	0.002
	Work – Can Write	0.558	0.143	1.064	3.894	0.06
	LingConf/Anxiety	-0.804	0.288	-0.915	-2.796	0.108
	Can Wr x LingConf/Anx	0.796	0.25	0.838	3.186	0.086

Table 74. Relationship between Linguistic Self-Confidence and Anxiety (Combined) and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.186	0.149		21.384	0
	Sup-report Conf.	0.323	0.18	0.293	1.799	0.079
	LingConf/Anxiety	0.16	0.241	0.107	0.664	0.51
	Conf. x LingConf/Anx	0.035	0.231	0.022	0.152	0.88
Shift Conversation	(Constant)	3.501	0.446		7.856	0
	Sup-report Conf.	0.32	0.44	0.428	0.728	0.494
	LingConf/Anxiety	-0.305	0.874	-0.249	-0.349	0.739
	Conf. x LingConf/Anx	0.277	0.662	0.323	0.418	0.691
Shift Writing	(Constant)	3.959	0.165		23.981	0.002
	Sup-report Conf.	0.621	0.121	1.142	5.127	0.036
	LingConf/Anxiety	-0.28	0.227	-0.277	-1.233	0.343
	Conf. x LingConf/Anx	0.267	0.174	0.335	1.534	0.265

Table 75. Correlations between Linguistic Self-Confidence and Anxiety (Combined) and course attendance

EUA Course	n	r	P
Shift Basics	243	.092	.155
Shift Conversation	310	-.042	.458
Shift Writing	124	.063	.49

Table 76. Logistic regression of Linguistic Self-Confidence and Anxiety (Combined) and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	LingConf/Anxiety	0.258	0.379	0.463	1	0.496	1.294
	(Constant)	1.416	1.394	1.032	1	0.31	4.122
Shift Conversation	LingConf/Anxiety	-0.257	0.257	1.002	1	0.317	0.773
	(Constant)	2.662	1.021	6.796	1	0.009	14.32
Shift Writing	LingConf/Anxiety	0.318	0.347	0.839	1	0.36	1.374
	(Constant)	-0.107	1.418	0.006	1	0.94	0.898

Table 77. Correlations between baseline Integrative Orientation and baseline Motivational Intensity

EUA Course	n	r	P
Shift Basics	244	.135	.035
Shift Conversation	316	.027	.628
Shift Writing	124	.178	.048

Table 78. Correlations between baseline Instrumental Orientation (Workplace) and baseline Motivational Intensity

EUA Course	n	r	P
Shift Basics	244	.210	.001
Shift Conversation	319	.272	<.001
Shift Writing	124	.154	.088

Table 79. Correlations between baseline Instrumental Orientation (Family) and baseline Motivational Intensity

EUA Course	n	r	P
Shift Basics	229	.439	< .001
Shift Conversation	236	.507	< .001
Shift Writing	124	.302	.001

Table 80. Correlations between baseline Instrumental Orientation and baseline Motivational Intensity

EUA Course	n	r	p
Shift Basics	244	.375	<.001
Shift Conversation	319	.364	<.001
Shift Writing	124	.302	.001

Table 81. Correlations between baseline Motivational Intensity and course attendance

EUA Course	n	r	p
Shift Basics	243	.076	.238
Shift Conversation	311	-.045	.434
Shift Writing	124	.055	.541

Table 82. Logistic regression of baseline Motivational Intensity and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Mot. Int.	0.898	0.465	3.721	1	0.054	2.454
	(Constant)	-1.928	2.208	0.762	1	0.383	0.146
Shift Conversation	Mot. Int.	0.019	0.439	0.002	1	0.965	1.019
	(Constant)	1.566	2.145	0.533	1	0.465	4.787
Shift Writing	Mot. Int.	0.716	0.539	1.764	1	0.184	2.046
	(Constant)	-2.286	2.615	0.764	1	0.382	0.102

Table 83. Relationship between Course attendance and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.325	0.106		40.829	<.001
	BEST Plus (baseline)	0.784	0.051	0.837	15.444	<.001
	Attendance	-0.021	0.036	-0.031	-0.579	0.564
	BEST x Attendance	-0.022	0.017	-0.072	-1.281	0.202
Shift Conversation	(Constant)	5.677	0.094		60.619	<.001
	BEST Plus (baseline)	0.714	0.06	0.687	11.995	<.001
	Attendance	-0.014	0.006	-0.14	-2.446	0.016
	BEST x Attendance	-0.005	0.003	-0.09	-1.587	0.115

Table 84. Relationship between Course attendance and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.732	0.045		60.487	<.001
	Self-report Profic.	0.612	0.071	0.65	8.563	<.001
	Attendance	0.024	0.016	0.095	1.498	0.136
	Profic. X Attendance	0.0	0.026	0.0	-0.004	0.997
Shift Conversation	(Constant)	3.156	0.041		76.489	<.001
	Self-report Profic.	0.498	0.072	0.517	6.906	<.001
	Attendance	0.0	0.003	0.006	0.089	0.929
	Profic. X Attendance	-0.004	0.005	-0.06	-0.786	0.433
Shift Writing	(Constant)	3.495	0.062		56.142	<.001
	Self-report Profic.	0.747	0.084	0.742	8.87	<.001
	Attendance	0.008	0.009	0.063	0.815	0.418
	Profic. X Attendance	0.001	0.013	0.004	0.045	0.964

Table 85. Relationship between Course attendance and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.087	0.13		23.778	<.001
	Sup-report Profic.	0.169	0.122	0.332	1.382	0.174
	Attendance	0.026	0.041	0.091	0.633	0.53
	Profic. X Attendance	-0.036	0.066	-0.13	-0.541	0.591
Shift Conversation	(Constant)	3.399	0.816		4.168	0.014
	Sup-report Profic.	0.424	0.945	0.651	0.449	0.677
	Attendance	0.029	0.059	0.339	0.494	0.647
	Profic. X Attendance	-0.047	0.073	-0.973	-0.652	0.55
Shift Writing	(Constant)	4.861	1.017		4.78	0.041
	Sup-report Profic.	1.177	0.912	1.719	1.29	0.326
	Attendance	-0.063	0.119	-0.697	-0.525	0.652
	Profic. X Attendance	-0.102	0.098	-1.063	-1.033	0.41

Table 86. Relationship between Course attendance and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.186	0.058		54.881	<.001
	Self-report Freq.	0.708	0.066	0.759	10.779	<.001
	Attendance	0.014	0.02	0.04	0.706	0.482
	Freq. x Attendance	-0.016	0.024	-0.048	-0.681	0.497
Shift Conversation	(Constant)	3.732	0.048		77.573	<.001
	Self-report Freq.	0.636	0.054	0.684	11.691	<.001
	Attendance	0.004	0.003	0.077	1.287	0.2
	Freq. x Attendance	-0.003	0.003	-0.055	-0.906	0.366
Shift Writing	(Constant)	4.027	0.066		60.943	<.001
	Self-report Freq.	0.696	0.076	0.787	9.174	<.001
	Attendance	0.012	0.01	0.087	1.199	0.234
	Freq. x Attendance	-0.007	0.012	-0.054	-0.625	0.534

Table 87. Relationship between Course attendance and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.269	0.109		29.886	<.001
	Sup-report Freq.	0.446	0.139	0.429	3.207	0.002
	Attendance	0.034	0.035	0.128	0.985	0.33
	Freq. x Attendance	0.029	0.046	0.086	0.636	0.528
Shift Conversation	(Constant)	4.131	1.207		3.423	0.027
	Sup-report Freq.	1.112	1.409	1.613	0.789	0.474
	Attendance	-0.043	0.076	-0.364	-0.564	0.603
	Freq. x Attendance	-0.076	0.097	-1.493	-0.782	0.478
Shift Writing	(Constant)	4.839	2.109		2.294	0.149
	Sup-report Freq.	6.239	8.804	7.519	0.709	0.552
	Attendance	-0.087	0.21	-0.667	-0.414	0.719
	Freq. x Attendance	-0.672	1.026	-6.492	-0.655	0.58

Table 88. Relationship between Course attendance and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.349	0.052		64.169	<.001
	Work – Can Do	0.617	0.06	0.698	10.315	<.001
	Attendance	0.02	0.018	0.061	1.09	0.277
	Can Do x Attend.	0.023	0.021	0.073	1.082	0.281
Shift Conversation	(Constant)	3.98	0.043		91.592	<.001
	Work – Can Do	0.33	0.055	0.413	5.986	<.001
	Attendance	0.006	0.003	0.132	1.978	0.05
	Can Do x Attend.	0.008	0.004	0.149	2.152	0.033

Table 89. Relationship between Course attendance and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.543	0.119		29.681	0
	Work – Can Do	0.624	0.135	0.577	4.614	0
	Attendance	-0.002	0.038	-0.007	-0.053	0.958
	Can Do x Attend.	0.011	0.042	0.032	0.254	0.801
Shift Conversation	(Constant)	3.946	1.307		3.018	0.029
	Work – Can Do	0.104	1.003	0.212	0.104	0.921
	Attendance	-0.005	0.087	-0.058	-0.06	0.955
	Can Do x Attend.	-0.005	0.07	-0.132	-0.076	0.942

Table 90. Relationship between Course attendance and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.301	0.11		48.091	<.001
	Work – Can Write	0.577	0.131	0.644	4.411	<.001
	Attendance	0.013	0.017	0.075	0.767	0.446
	Can Write x Attend.	-0.024	0.018	-0.192	-1.324	0.189

Table 91. Relationship between Course attendance and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	4.956	6.925		0.716	0.548
	Work – Can Write	0.543	7.145	1.037	0.076	0.946
	Attendance	0.057	0.765	0.438	0.075	0.947
	Can Write x Attend.	-0.051	0.824	-0.705	-0.062	0.956

Table 92. Relationship between Course attendance and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.188	0.14		22.801	<.001
	Sup-report Freq.	0.388	0.176	0.354	2.197	0.033
	Attendance	-0.016	0.044	-0.049	-0.356	0.723
	Freq. x Attendance	0.016	0.059	0.045	0.278	0.782
Shift Conversation	(Constant)	1.987	2.73		0.728	0.507
	Sup-report Freq.	2.406	2.668	3.002	0.902	0.418
	Attendance	0.092	0.17	0.633	0.543	0.616
	Freq. x Attendance	-0.169	0.18	-2.874	-0.937	0.402
Shift Writing	(Constant)	3.313	0.18		18.372	0.003
	Sup-report Freq.	0.009	0.139	0.016	0.063	0.956
	Attendance	0.123	0.022	0.817	5.557	0.031
	Freq. x Attendance	0.037	0.015	0.482	2.426	0.136

Table 93. Relationship between baseline Motivational Intensity and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.287	0.094		45.396	<.001
	BEST Plus (baseline)	0.771	0.047	0.812	16.3	<.001
	Motivational Intens.	-0.093	0.284	-0.017	-0.33	0.742
	BEST x Mot. Int.	-0.127	0.137	-0.047	-0.929	0.355
Shift Conversation	(Constant)	5.644	0.093		60.741	<.001
	BEST Plus (baseline)	0.72	0.061	0.693	11.89	<.001
	Motivational Intens.	0.156	0.243	0.038	0.644	0.521
	BEST x Mot. Int.	0.334	0.23	0.085	1.452	0.148

Table 94. Relationship between baseline Motivational Intensity and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.767	0.038		72.98	<.001
	Self-report Profic.	0.61	0.058	0.654	10.444	<.001
	Motivational Intens.	0.163	0.117	0.089	1.39	0.167
	Profic. X Mot. Int.	0.304	0.178	0.109	1.704	0.091
Shift Conversation	(Constant)	3.154	0.039		81.414	<.001
	Self-report Profic.	0.485	0.064	0.503	7.616	<.001
	Motivational Intens.	0.236	0.104	0.155	2.272	0.024
	Profic. X Mot. Int.	-0.128	0.23	-0.038	-0.555	0.58
Shift Writing	(Constant)	3.548	0.046		76.58	<.001
	Self-report Profic.	0.694	0.076	0.689	9.093	<.001
	Motivational Intens.	-0.275	0.186	-0.109	-1.475	0.144
	Profic. X Mot. Int.	0.757	0.361	0.159	2.097	0.039

Table 95. Relationship between baseline Motivational Intensity and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.244	0.206		15.756	0
	Sup-report Profic.	-0.152	0.403	-0.306	-0.376	0.709
	Motivational Intens.	-0.239	1.171	-0.099	-0.204	0.84
	Profic. X Mot. Int.	1.549	2.44	0.591	0.635	0.529
Shift Conversation	(Constant)	3.643	0.225		16.216	0
	Sup-report Profic.	-0.095	0.23	-0.16	-0.413	0.694
	Motivational Intens.	-0.425	0.355	-0.435	-1.195	0.277
	Profic. X Mot. Int.	-0.369	0.469	-0.306	-0.785	0.462

Table 96. Relationship between baseline Motivational Intensity and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.211	0.049		65.635	<.001
	Self-report Freq.	0.664	0.054	0.722	12.357	<.001
	Motivational Intens.	0.065	0.159	0.025	0.409	0.683
	Freq. x Mot. Int.	0.018	0.171	0.006	0.105	0.917
Shift Conversation	(Constant)	3.728	0.046		81.58	<.001
	Self-report Freq.	0.637	0.052	0.682	12.231	<.001
	Motivational Intens.	0.308	0.118	0.146	2.615	0.01
	Freq. x Mot. Int.	-0.229	0.173	-0.074	-1.325	0.187
Shift Writing	(Constant)	4.081	0.053		77.648	<.001
	Self-report Freq.	0.681	0.072	0.77	9.482	<.001
	Motivational Intens.	-0.03	0.222	-0.01	-0.135	0.893
	Freq. x Mot. Int.	-0.161	0.385	-0.036	-0.419	0.676

Table 97. Relationship between baseline Motivational Intensity and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.325	0.101		32.913	0
	Sup-report Freq.	0.494	0.171	0.469	2.882	0.006
	Motivational Intens.	-0.78	0.335	-0.334	-2.324	0.025
	Freq. x Mot. Int.	-0.119	0.868	-0.024	-0.137	0.891
Shift Conversation	(Constant)	3.55	0.351		10.112	0
	Sup-report Freq.	0.552	0.391	0.767	1.413	0.207
	Motivational Intens.	0.086	0.542	0.059	0.159	0.879
	Freq. x Mot. Int.	0.56	0.682	0.415	0.821	0.443

Table 98. Relationship between baseline Motivational Intensity and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.378	0.045		75.343	<.001
	Work – Can Do	0.647	0.051	0.73	12.759	<.001
	Motivational Intens	0.184	0.137	0.077	1.343	0.182
	Can Do x Mot. Int.	-0.049	0.177	-0.016	-0.278	0.782
Shift Conversation	(Constant)	3.987	0.042		94.013	<.001
	Work – Can Do	0.37	0.053	0.463	6.983	<.001
	Motivational Intens	0.317	0.132	0.188	2.407	0.017
	Can Do x Mot. Int.	0.1	0.123	0.064	0.82	0.414

Table 99. Relationship between baseline Motivational Intensity and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.641	0.125		29.177	<.001
	Work – Can Do	0.528	0.144	0.5	3.68	0.001
	Motivational Intens	-0.6	0.532	-0.239	-1.127	0.266
	Can Do x Mot. Int.	0.635	0.54	0.244	1.176	0.246
Shift Conversation	(Constant)	3.937	0.273		14.417	<.001
	Work – Can Do	0.065	0.226	0.142	0.286	0.783
	Motivational Intens	-0.181	0.43	-0.188	-0.42	0.687
	Can Do x Mot. Int.	-0.172	0.435	-0.164	-0.395	0.705

Table 100. Relationship between baseline Motivational Intensity and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	5.378	0.081		66.08	<.001
	Work – Can Write	0.436	0.09	0.486	4.819	<.001
	Motivational Intens	-0.053	0.325	-0.016	-0.163	0.871
	Can Write x Mot. In.	0.061	0.343	0.018	0.178	0.859

Table 101. Relationship between baseline Motivational Intensity and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.243	0.129		25.045	<.001
	Sup-report Conf.	0.293	0.151	0.266	1.936	0.059
	Motivational Intens.	-1.136	0.475	-0.406	-2.391	0.021
	Conf. x Mot. Int.	1.342	0.613	0.381	2.19	0.034
Shift Conversation	(Constant)	3.373	0.49		6.878	<.001
	Sup-report Conf.	0.394	0.454	0.527	0.869	0.418
	Motivational Intens.	-0.587	0.72	-0.354	-0.815	0.446
	Conf. x Mot. Int.	0.246	0.77	0.175	0.319	0.76

Table 102. Relationship between end of program Motivational Intensity and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.137	0.105		39.353	<.001
	BEST Plus (baseline)	0.713	0.05	0.794	14.198	<.001
	Motivational Intens.	0.283	0.16	0.1	1.764	0.08
	BEST x Mot. Int.	0.039	0.075	0.029	0.526	0.6
Shift Conversation	(Constant)	5.629	0.092		61.239	<.001
	BEST Plus (baseline)	0.694	0.061	0.682	11.291	<.001
	Motivational Intens.	0.259	0.134	0.118	1.93	0.056
	BEST x Mot. Int.	-0.046	0.078	-0.035	-0.593	0.554

Table 103. Relationship between end of program Motivational Intensity and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.773	0.04		69.333	<.001
	Self-report Profic.	0.539	0.066	0.566	8.123	<.001
	Motivational Intens.	0.201	0.066	0.217	3.043	0.003
	Profic. X Mot. Int.	-0.054	0.094	-0.037	-0.569	0.57
Shift Conversation	(Constant)	3.161	0.038		84.042	<.001
	Self-report Profic.	0.446	0.062	0.463	7.197	<.001
	Motivational Intens.	0.23	0.055	0.269	4.147	<.001
	Profic. X Mot. Int.	-0.022	0.092	-0.015	-0.237	0.813
Shift Writing	(Constant)	3.528	0.046		76.098	<.001
	Self-report Profic.	0.653	0.08	0.629	8.147	<.001
	Motivational Intens.	0.249	0.101	0.251	2.454	0.017
	Profic. X Mot. Int.	-0.071	0.094	-0.072	-0.759	0.45

Table 104. Relationship between end of program Motivational Intensity and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.125	0.117		26.782	<.001
	Sup-report Profic.	0.618	0.166	0.526	3.718	0.001
	Motivational Intens.	0.16	0.165	0.138	0.972	0.336
	Profic. X Mot. Int.	-0.078	0.246	-0.04	-0.317	0.753
Shift Conversation	(Constant)	3.591	0.169		21.203	<.001
	Sup-report Profic.	-0.028	0.17	-0.047	-0.166	0.874
	Motivational Intens.	-0.322	0.223	-0.564	-1.445	0.199
	Profic. X Mot. Int.	0.578	0.217	1.004	2.668	0.037
Shift Writing	(Constant)	4.136	0.049		84.111	<.001
	Sup-report Profic.	-0.07	0.118	-0.103	-0.593	0.613
	Motivational Intens.	1.101	0.249	0.86	4.428	0.047
	Profic. X Mot. Int.	2.794	0.463	1.559	6.039	0.026

Table 105. Relationship between end of program Motivational Intensity and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.206	0.047		67.991	<.001
	Self-report Freq.	0.567	0.052	0.604	10.944	<.001
	Motivational Intens.	0.437	0.076	0.325	5.764	<.001
	Freq. x Mot. Int.	-0.001	0.068	0	-0.019	0.985
Shift Conversation	(Constant)	3.761	0.045		84.252	<.001
	Self-report Freq.	0.544	0.051	0.582	10.647	<.001
	Motivational Intens.	0.315	0.069	0.263	4.57	<.001
	Freq. x Mot. Int.	-0.153	0.072	-0.117	-2.125	0.035
Shift Writing	(Constant)	4.109	0.053		77.984	<.001
	Self-report Freq.	0.485	0.069	0.556	7.022	<.001
	Motivational Intens.	0.293	0.118	0.259	2.476	0.016
	Freq. x Mot. Int.	-0.13	0.084	-0.148	-1.557	0.124

Table 106. Relationship between end of program Motivational Intensity and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.355	0.117		28.72	<.001
	Sup-report Freq.	0.406	0.161	0.385	2.524	0.015
	Motivational Intens.	0.195	0.175	0.18	1.114	0.271
	Freq. x Mot. Int.	-0.119	0.238	-0.073	-0.502	0.618
Shift Conversation	(Constant)	3.767	0.263		14.339	<.001
	Sup-report Freq.	0.186	0.267	0.258	0.697	0.512
	Motivational Intens.	0.387	0.325	0.455	1.189	0.279
	Freq. x Mot. Int.	-0.017	0.323	-0.018	-0.053	0.96
Shift Writing	(Constant)	3.5	0.345		10.14	0.01
	Sup-report Freq.	0.39	0.401	0.47	0.972	0.434
	Motivational Intens.	0.658	0.851	0.354	0.773	0.52
	Freq. x Mot. Int.	1.627	1.865	0.412	0.872	0.475

Table 107. Relationship between end of program Motivational Intensity and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.386	0.043		78.52	<.001
	Work – Can Do	0.554	0.05	0.612	11.104	<.001
	Motivational Intens	0.394	0.07	0.32	5.634	<.001
	Can Do x Mot. Int.	-0.042	0.069	-0.031	-0.599	0.55
Shift Conversation	(Constant)	4.028	0.038		106.619	<.001
	Work – Can Do	0.277	0.047	0.347	5.875	<.001
	Motivational Intens	0.353	0.06	0.376	5.87	<.001
	Can Do x Mot. Int.	-0.234	0.07	-0.207	-3.357	0.001

Table 108. Relationship between end of program Motivational Intensity and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.498	0.128		27.372	<.001
	Work – Can Do	0.573	0.15	0.527	3.832	<.001
	Motivational Intens	0.19	0.175	0.154	1.085	0.284
	Can Do x Mot. Int.	0.208	0.211	0.126	0.986	0.33
Shift Conversation	(Constant)	3.847	0.205		18.789	<.001
	Work – Can Do	0.114	0.176	0.251	0.649	0.537
	Motivational Intens	-0.039	0.236	-0.068	-0.164	0.874
	Can Do x Mot. Int.	0.27	0.206	0.522	1.308	0.232

Table 109. Relationship between end of program Motivational Intensity and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	5.445	0.065		83.762	<.001
	Work – Can Write	0.396	0.073	0.43	5.44	<.001
	Motivational Intens	0.215	0.132	0.164	1.626	0.108
	Can Write x Mot. In.	-0.564	0.113	-0.49	-5.004	<.001

Table 110. Relationship between end of program Motivational Intensity and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	5.2	0.388		13.404	0.006
	Work – Can Write	0.427	0.322	0.814	1.327	0.316
	Motivational Intens	-0.836	1.238	-0.45	-0.675	0.569
	Can Write x Mot. In.	0.044	1.056	0.027	0.042	0.97

Table 111. Relationship between end of program Motivational Intensity and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.182	0.13		24.466	<.001
	Sup-report Conf.	0.314	0.157	0.282	2.007	0.051
	Motivational Intens.	0.435	0.182	0.331	2.39	0.021
	Conf. x Mot. Int.	0.141	0.271	0.073	0.521	0.605
Shift Conversation	(Constant)	3.603	0.394		9.146	<.001
	Sup-report Conf.	0.093	0.342	0.124	0.272	0.794
	Motivational Intens.	0.201	0.466	0.208	0.432	0.681
	Conf. x Mot. Int.	0.202	0.402	0.202	0.503	0.633
Shift Writing	(Constant)	4.159	0.123		33.839	0.001
	Sup-report Conf.	0.26	0.152	0.477	1.712	0.229
	Motivational Intens.	0.12	0.346	0.056	0.345	0.763
	Conf. x Mot. Int.	1.164	0.6	0.55	1.941	0.192

Table 112. Correlations between baseline Social Milieu and baseline Social Support

EUA Course	n	r	P
Shift Basics	244	.240	<.001
Shift Conversation	319	.191	.001
Shift Writing	124	.283	.001

Table 113. Structural Equation Model for Social Milieu and Social Support (6-items) using Confirmatory Factor Analyses

EUA Course	Model	χ^2	df	GFI	RMSEA	SRMR	CFI	NNFI
Shift Basics	Two-factor	22.077	8	0.963	0.0957	0.0648	0.828	0.677
	One-factor	25.498	9	0.958	0.0977	0.0684	0.802	0.67
Shift Conversation	Two-factor	16.885	8	0.974	0.0732	0.0475	0.925	0.859
	One-factor	23.785	9	0.963	0.0891	0.0642	0.865	0.775
Shift Writing	Two-factor	3.862	9	0.988	0	0.0403	1	1.253
	One-factor	3.957	10	0.988	0	0.0393	1	1.27

Table 114. Correlations between baseline Social Milieu and course attendance

EUA Course	n	r	P
Shift Basics	243	0.0	.993
Shift Conversation	311	-.018	.751
Shift Writing	124	.145	.109

Table 115. Correlations between baseline Perceived Social Support and course attendance

EUA Course	n	r	P
Shift Basics	243	.135	.035
Shift Conversation	311	.058	.305
Shift Writing	124	.198	.027

Table 116. Correlations between baseline Social Milieu and Social Support (Combined) and course attendance

EUA Course	n	r	P
Shift Basics	243	.104	.105
Shift Conversation	310	.043	.456
Shift Writing	124	.218	.015

Table 117. Logistic regression of baseline Social Milieu and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Social Mil.	0.193	0.487	0.157	1	0.692	1.213
	(Constant)	1.435	2.341	0.376	1	0.54	4.201
Shift Conversation	Social Mil.	-0.107	0.388	0.076	1	0.782	0.898
	(Constant)	2.176	1.879	1.341	1	0.247	8.81
Shift Writing	Social Mil.	0.634	0.552	1.318	1	0.251	1.885
	(Constant)	-1.859	2.652	0.491	1	0.483	0.156

Table 118. Logistic regression of baseline Perceived Social Support and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Social Sup.	0.659	0.303	4.729	1	0.03	1.932
	(Constant)	-0.02	1.076	0	1	0.985	0.98
Shift Conversation	Social Sup.	-0.134	0.207	0.418	1	0.518	0.875
	(Constant)	2.168	0.807	7.221	1	0.007	8.743
Shift Writing	Social Sup.	0.773	0.299	6.687	1	0.01	2.166
	(Constant)	-1.692	1.108	2.33	1	0.127	0.184

Table 119. Logistic regression of baseline Social Milieu and Social Support (Combined) and graduation

EUA Course		B	SE	Wald	df	p	Exp(B)
Shift Basics	Social Co.	0.783	0.426	3.383	1	0.066	2.189
	(Constant)	-0.939	1.778	0.279	1	0.597	0.391
Shift Conversation	Social Co.	-0.214	0.34	0.394	1	0.53	0.808
	(Constant)	2.58	1.481	3.038	1	0.081	13.202
Shift Writing	Social Co.	1.197	0.47	6.477	1	0.011	3.311
	(Constant)	-3.922	1.996	3.86	1	0.049	0.02

Table 120. Relationship between baseline perceived Social Support and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.286	0.095		45.3	<.001
	BEST Plus (baseline)	0.774	0.047	0.815	16.423	<.001
	Social Support	-0.001	0.128	0	-0.009	0.993
	BEST x Soc. Sup.	-0.043	0.056	-0.038	-0.755	0.451
Shift Conversation	(Constant)	5.634	0.093		60.78	<.001
	BEST Plus (baseline)	0.733	0.06	0.705	12.16	<.001
	Social Support	-0.221	0.117	-0.109	-1.89	0.061
	BEST x Soc. Sup.	0.072	0.083	0.05	0.867	0.387

Table 121. Relationship between baseline perceived Social Support and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.77	0.039		71.367	<.001
	Self-report Profic.	0.608	0.06	0.651	10.147	<.001
	Social Support	0.01	0.052	0.013	0.195	0.845
	Profic. X Soc. Sup.	-0.057	0.073	-0.05	-0.783	0.435
Shift Conversation	(Constant)	3.152	0.039		81.021	<.001
	Self-report Profic.	0.489	0.064	0.507	7.619	<.001
	Social Support	-0.064	0.052	-0.084	-1.223	0.223
	Profic. X Soc. Sup.	0.149	0.088	0.117	1.693	0.092
Shift Writing	(Constant)	3.523	0.047		74.536	<.001
	Self-report Profic.	0.717	0.085	0.711	8.392	<.001
	Social Support	0.042	0.067	0.048	0.628	0.532
	Profic. X Soc. Sup.	0.06	0.108	0.047	0.552	0.583

Table 122. Relationship between baseline perceived Social Support and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.162	0.126		25.147	<.001
	Sup-report Profic.	0.076	0.08	0.153	0.947	0.349
	Social Support	-0.002	0.209	-0.001	-0.008	0.994
	Profic. X Soc. Sup.	-0.239	0.351	-0.124	-0.683	0.498
Shift Conversation	(Constant)	3.635	0.227		16.015	<.001
	Sup-report Profic.	0.089	0.276	0.149	0.323	0.758
	Social Support	-0.511	0.491	-0.713	-1.041	0.338
	Profic. X Soc. Sup.	0.552	0.484	0.891	1.14	0.298
Shift Writing	(Constant)	4.376	0.15		29.26	0.001
	Sup-report Profic.	0.704	0.169	1.029	4.157	0.053
	Social Support	-0.306	0.128	-0.638	-2.387	0.14
	Profic. X Soc. Sup.	-0.49	0.342	-0.351	-1.433	0.288

Table 123. Relationship between baseline perceived Social Support and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.222	0.05		64.488	<.001
	Self-report Freq.	0.656	0.055	0.714	11.992	<.001
	Social Support	0.041	0.068	0.036	0.609	0.543
	Freq. x Soc. Sup.	-0.061	0.068	-0.052	-0.898	0.371
Shift Conversation	(Constant)	3.725	0.047		78.649	<.001
	Self-report Freq.	0.636	0.055	0.681	11.653	<.001
	Social Support	-0.009	0.061	-0.009	-0.153	0.878
	Freq. x Soc. Sup.	0.025	0.058	0.025	0.429	0.669
Shift Writing	(Constant)	4.068	0.052		78.084	<.001
	Self-report Freq.	0.673	0.065	0.762	10.376	<.001
	Social Support	-0.071	0.073	-0.071	-0.972	0.334
	Freq. x Soc. Sup.	0.162	0.093	0.126	1.756	0.083

Table 124. Relationship between baseline perceived Social Support and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.298	0.112		29.5	<.001
	Sup-report Freq.	0.484	0.143	0.46	3.393	0.001
	Social Support	0.015	0.167	0.013	0.09	0.929
	Freq. x Soc. Sup.	-0.015	0.3	-0.007	-0.05	0.96
Shift Conversation	(Constant)	3.544	0.601		5.896	0.001
	Sup-report Freq.	0.583	0.78	0.809	0.747	0.483
	Social Support	0.06	1.49	0.057	0.041	0.969
	Freq. x Soc. Sup.	0.543	1.402	0.629	0.387	0.712
Shift Writing	(Constant)	3.196	0.171		18.638	0.003
	Sup-report Freq.	1.038	0.14	1.251	7.433	0.018
	Social Support	-0.674	0.178	-0.969	-3.792	0.063
	Freq. x Soc. Sup.	0.219	0.2	0.237	1.096	0.387

Table 125. Relationship between baseline perceived Social Support and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.383	0.046		73.807	<.001
	Work – Can Do	0.636	0.052	0.717	12.24	<.001
	Social Support	0.063	0.063	0.059	0.997	0.32
	Can Do x Soc. Sup.	-0.033	0.062	-0.031	-0.533	0.595
Shift Conversation	(Constant)	3.989	0.044		91.434	<.001
	Work – Can Do	0.378	0.055	0.473	6.839	<.001
	Social Support	-0.022	0.056	-0.027	-0.397	0.692
	Can Do x Soc. Sup.	0.006	0.064	0.007	0.101	0.92

Table 126. Relationship between baseline perceived Social Support and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.58	0.117		30.587	<.001
	Work – Can Do	0.584	0.138	0.553	4.236	<.001
	Social Support	0	0.19	0	-0.003	0.998
	Can Do x Soc. Sup.	-0.029	0.228	-0.019	-0.128	0.899
Shift Conversation	(Constant)	3.956	0.33		11.987	<.001
	Work – Can Do	0.05	0.305	0.109	0.163	0.875
	Social Support	0.078	0.724	0.109	0.107	0.918
	Can Do x Soc. Sup.	0.033	0.583	0.059	0.056	0.957

Table 127. Relationship between baseline perceived Social Support and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	5.361	0.079		68.003	<.001
	Work – Can Write	0.462	0.086	0.516	5.354	<.001
	Social Support	-0.074	0.113	-0.064	-0.652	0.516
	Can Write x Soc. Su.	0.228	0.108	0.206	2.098	0.039

Table 128. Relationship between baseline perceived Social Support and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	4.664	0.375		12.435	0.006
	Work – Can Write	0.652	0.278	1.244	2.347	0.143
	Social Support	-0.573	0.397	-0.824	-1.443	0.286
	Can Write x Soc. Su.	0.477	0.332	0.815	1.434	0.288

Table 129. Relationship between baseline perceived Social Support and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.202	0.139		23.053	0
	Sup-report Conf.	0.385	0.157	0.349	2.458	0.018
	Social Support	-0.008	0.207	-0.006	-0.039	0.969
	Conf. x Soc. Sup.	-0.165	0.25	-0.094	-0.659	0.513
Shift Conversation	(Constant)	4.597	1.41		3.26	0.017
	Sup-report Conf.	-0.822	1.467	-1.098	-0.56	0.595
	Social Support	2.566	3.361	2.11	0.763	0.474
	Conf. x Soc. Sup.	-1.824	2.704	-2.073	-0.674	0.525
Shift Writing	(Constant)	3.695	0.099		37.33	0.001
	Sup-report Conf.	0.733	0.057	1.346	12.923	0.006
	Social Support	-0.497	0.094	-0.621	-5.32	0.034
	Conf. x Soc. Sup.	0.222	0.063	0.315	3.524	0.072

Table 130. Relationship between baseline Social Milieu and perceived Social Support (Combined) and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.279	0.095		45.282	<.001
	BEST Plus (baseline)	0.769	0.047	0.809	16.232	<.001
	Social Combined	-0.014	0.204	-0.004	-0.069	0.945
	BEST x Soc. Com.	-0.093	0.083	-0.059	-1.121	0.264
Shift Conversation	(Constant)	5.641	0.093		60.741	<.001
	BEST Plus (baseline)	0.72	0.061	0.693	11.84	<.001
	Social Combined	-0.28	0.19	-0.086	-1.47	0.144
	BEST x Soc. Com.	0.136	0.149	0.054	0.911	0.364

Table 131. Relationship between baseline Social Milieu and perceived Social Support (Combined) and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.768	0.039		71.855	<.001
	Self-report Profic.	0.604	0.06	0.647	10.115	<.001
	Social Combined	0.003	0.083	0.002	0.038	0.97
	Profic. X Soc. Com.	-0.128	0.109	-0.078	-1.167	0.245
Shift Conversation	(Constant)	3.16	0.039		80.922	<.001
	Self-report Profic.	0.483	0.064	0.501	7.509	<.001
	Social Combined	-0.069	0.083	-0.058	-0.828	0.409
	Profic. X Soc. Com.	0.242	0.148	0.115	1.633	0.104
Shift Writing	(Constant)	3.524	0.047		74.609	<.001
	Self-report Profic.	0.714	0.086	0.708	8.33	<.001
	Social Combined	0.075	0.116	0.049	0.65	0.517
	Profic. X Soc. Com.	0.12	0.184	0.056	0.652	0.516

Table 132. Relationship between baseline Social Milieu and perceived Social Support (Combined) and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.157	0.125		25.233	<.001
	Sup-report Profic.	0.11	0.074	0.222	1.496	0.142
	Social Combined	0.178	0.334	0.107	0.535	0.596
	Profic. X Soc. Com.	-0.393	0.441	-0.18	-0.891	0.378
Shift Conversation	(Constant)	3.796	0.264		14.353	<.001
	Sup-report Profic.	-0.291	0.356	-0.488	-0.817	0.445
	Social Combined	0.25	0.84	0.222	0.298	0.776
	Profic. X Soc. Com.	-0.638	0.948	-0.636	-0.674	0.526
Shift Writing	(Constant)	4.296	0.099		43.474	0.001
	Sup-report Profic.	0.829	0.112	1.211	7.407	0.018
	Social Combined	-0.777	0.19	-0.693	-4.091	0.055
	Profic. X Soc. Com.	-0.65	0.429	-0.208	-1.514	0.269

Table 133. Relationship between baseline Social Milieu and perceived Social Support (Combined) and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.215	0.049		65.749	<.001
	Self-report Freq.	0.657	0.054	0.714	12.196	<.001
	Social Combined	0.074	0.112	0.043	0.664	0.508
	Freq. x Soc. Com.	-0.089	0.103	-0.055	-0.86	0.391
Shift Conversation	(Constant)	3.725	0.047		79.179	<.001
	Self-report Freq.	0.635	0.054	0.68	11.819	<.001
	Social Combined	-0.008	0.094	-0.005	-0.089	0.929
	Freq. x Soc. Com.	0.072	0.103	0.04	0.694	0.489
Shift Writing	(Constant)	4.076	0.052		78.091	<.001
	Self-report Freq.	0.676	0.065	0.765	10.401	<.001
	Social Combined	-0.143	0.128	-0.082	-1.117	0.267
	Freq. x Soc. Com.	0.208	0.155	0.097	1.337	0.185

Table 134. Relationship between baseline Social Milieu and perceived Social Support (Combined) and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.284	0.108		30.366	<.001
	Sup-report Freq.	0.491	0.141	0.467	3.49	0.001
	Social Combined	-0.191	0.249	-0.118	-0.768	0.447
	Freq. x Soc. Com.	0.164	0.463	0.055	0.355	0.724
Shift Conversation	(Constant)	3.55	0.305		11.622	<.001
	Sup-report Freq.	0.622	0.352	0.865	1.767	0.128
	Social Combined	-0.134	0.914	-0.08	-0.147	0.888
	Freq. x Soc. Com.	0.844	0.813	0.677	1.038	0.339
Shift Writing	(Constant)	3.059	0.257		11.88	0.007
	Sup-report Freq.	1.113	0.209	1.341	5.316	0.034
	Social Combined	-1.762	0.585	-1.083	-3.011	0.095
	Freq. x Soc. Com.	0.785	0.582	0.392	1.349	0.31

Table 135. Relationship between baseline Social Milieu and perceived Social Support (Combined) and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.381	0.045		75.155	<.001
	Work – Can Do	0.64	0.051	0.722	12.571	<.001
	Social Combined	0.141	0.101	0.086	1.403	0.163
	Can Do x Soc. Com.	-0.027	0.094	-0.017	-0.284	0.776
Shift Conversation	(Constant)	3.988	0.043		92.346	<.001
	Work – Can Do	0.379	0.055	0.474	6.957	<.001
	Social Combined	0.0	0.087	0.0	0.001	0.999
	Can Do x Soc. Com.	0.072	0.103	0.047	0.698	0.486

Table 136. Relationship between baseline Social Milieu and perceived Social Support (Combined) and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.566	0.117		30.601	<.001
	Work – Can Do	0.564	0.138	0.534	4.076	<.001
	Social Combined	-0.136	0.308	-0.078	-0.441	0.662
	Can Do x Soc. Com.	-0.086	0.334	-0.046	-0.257	0.798
Shift Conversation	(Constant)	4.036	0.245		16.479	<.001
	Work – Can Do	-0.045	0.22	-0.1	-0.207	0.842
	Social Combined	0.218	0.684	0.2	0.319	0.759
	Can Do x Soc. Com.	-0.446	0.608	-0.49	-0.733	0.487

Table 137. Relationship between baseline Social Milieu and perceived Social Support (Combined) and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	5.375	0.078		68.662	<.001
	Work – Can Write	0.444	0.086	0.496	5.187	<.001
	Social Combined	-0.186	0.191	-0.094	-0.973	0.334
	Can Write x Soc. Co.	0.407	0.202	0.193	2.014	0.047

Table 138. Relationship between baseline Social Milieu and perceived Social Support (Combined) and supervisor-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	4.492	0.229		19.592	0.003
	Work – Can Write	0.742	0.161	1.415	4.601	0.044
	Social Combined	-1.668	0.543	-1.025	-3.069	0.092
	Can Write x Soc. Co.	1.309	0.403	1.038	3.246	0.083

Table 139. Relationship between baseline Social Milieu and perceived Social Support (Combined) and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.178	0.137		23.21	<.001
	Sup-report Conf.	0.391	0.154	0.354	2.532	0.015
	Social Combined	-0.179	0.324	-0.093	-0.553	0.583
	Conf. x Soc. Com.	-0.141	0.395	-0.06	-0.358	0.722
Shift Conversation	(Constant)	3.56	0.485		7.343	<.001
	Sup-report Conf.	0.234	0.47	0.312	0.498	0.636
	Social Combined	-0.319	1.511	-0.167	-0.211	0.84
	Conf. x Soc. Com.	0.149	1.18	0.115	0.127	0.903
Shift Writing	(Constant)	3.699	0.011		322.504	<.001
	Sup-report Conf.	0.713	0.006	1.31	110.506	<.001
	Social Combined	-1.1	0.024	-0.587	-45.06	<.001
	Conf. x Soc. Com.	0.515	0.017	0.313	30.079	0.001

Table 140. Correlations between baseline Motivational Intensity and Group Cohesion

EUA Course	n	r	P
Shift Basics	145	.259	.002
Shift Conversation	163	.073	.354
Shift Writing	75	-.009	.942

Table 141. Correlations between post-program Motivational Intensity and Group Cohesion

EUA Course	n	r	P
Shift Basics	149	.292	<.001
Shift Conversation	163	.301	<.001
Shift Writing	75	.474	<.001

Table 142. Relationship between Group Cohesion and Change on Motivational Intensity

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.21	0.053		78.916	<.001
	Base. Mot. Int.	0.203	0.166	0.104	1.225	0.222
	Group Cohesion	0.502	0.139	0.319	3.619	<.001
	Mot. Int. x Grp. Coh.	0.538	0.394	0.122	1.364	0.175
Shift Conversation	(Constant)	4.33	0.051		84.84	<.001
	Base. Mot. Int.	0.117	0.131	0.068	0.891	0.374
	Group Cohesion	0.601	0.151	0.305	3.975	<.001
	Mot. Int. x Grp. Coh.	0.28	0.402	0.054	0.696	0.488
Shift Writing	(Constant)	4.52	0.068		66.049	<.001
	Base. Mot. Int.	0.273	0.329	0.09	0.829	0.41
	Group Cohesion	0.911	0.323	0.351	2.82	0.006
	Mot. Int. x Grp. Coh.	3.158	1.818	0.225	1.737	0.087

Table 143. Relationship between baseline Motivational Intensity, Group Cohesion and standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.168	0.111		37.481	<.001
	BEST Plus (baseline)	0.759	0.054	0.829	14.167	<.001
	Mot. Int. Baseline	-0.297	0.335	-0.057	-0.887	0.377
	Group cohesion	-0.026	0.303	-0.006	-0.085	0.933
	BEST x Mot. Int.	-0.19	0.156	-0.077	-1.217	0.226
	BEST x Grp. Coh.	0.062	0.132	0.034	0.468	0.641
	Mot. Int. x Grp. Coh.	-0.294	0.794	-0.026	-0.371	0.711
	BEST x MI x GC	-0.162	0.385	-0.03	-0.42	0.675
Shift Conversation	(Constant)	5.674	0.1		56.654	<.001
	BEST Plus (baseline)	0.759	0.069	0.711	11.017	<.001
	Mot. Int. Baseline	0.114	0.292	0.03	0.39	0.697
	Group cohesion	0.025	0.296	0.005	0.084	0.933
	BEST x Mot. Int.	0.37	0.281	0.099	1.314	0.192
	BEST x Grp. Coh.	0.23	0.229	0.065	1.003	0.318
	Mot. Int. x Grp. Coh.	0.74	1.029	0.057	0.719	0.473
	BEST x MI x GC	-0.285	0.991	-0.023	-0.288	0.774

Table 144. Relationship between baseline Motivational Intensity, Group Cohesion and self-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.788	0.04		68.946	<.001
	Proficiency (baseline)	0.577	0.059	0.618	9.776	<.001
	Mot. Int. Baseline	0.009	0.133	0.005	0.068	0.946
	Group cohesion	0.146	0.105	0.097	1.388	0.168
	Prof. x Mot. Int.	0.433	0.189	0.156	2.298	0.023
	Prof. x Grp. Coh.	0.194	0.153	0.08	1.268	0.207
	Mot. Int. x Grp. Coh.	-0.568	0.306	-0.137	-1.856	0.066
	Prof. x MI x GC	0.343	0.539	0.042	0.635	0.526
Shift Conversation	(Constant)	3.152	0.041		77.815	<.001
	Proficiency (baseline)	0.482	0.068	0.508	7.043	<.001
	Mot. Int. Baseline	0.226	0.107	0.153	2.119	0.036
	Group cohesion	0.165	0.122	0.095	1.356	0.177
	Prof. x Mot. Int.	-0.165	0.234	-0.05	-0.706	0.481
	Prof. x Grp. Coh.	0.104	0.257	0.029	0.404	0.687
	Mot. Int. x Grp. Coh.	0.408	0.325	0.091	1.255	0.212
	Prof. x MI x GC	-1.22	0.786	-0.111	-1.553	0.123
Shift Writing	(Constant)	3.525	0.051		69.363	<.001
	Proficiency (baseline)	0.652	0.157	0.629	4.148	<.001
	Mot. Int. Baseline	0.092	0.281	0.031	0.327	0.745
	Group cohesion	0.324	0.27	0.126	1.201	0.234
	Prof. x Mot. Int.	1.636	1.132	0.343	1.444	0.153
	Prof. x Grp. Coh.	0.301	1.25	0.052	0.241	0.811
	Mot. Int. x Grp. Coh.	0.212	1.778	0.015	0.119	0.905
	Prof. x MI x GC	-9.927	9.432	-0.303	-1.052	0.296

Table 145. Relationship between baseline Motivational Intensity, Group Cohesion and supervisor-report measure of English proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.062	0.166		18.497	0
	Proficiency (baseline)	0.79	0.357	0.67	2.214	0.033
	Mot. Int. Baseline	0.656	0.934	0.272	0.702	0.487
	Group cohesion	0.287	0.28	0.121	1.026	0.311
	Prof. x Mot. Int.	-0.534	1.984	-0.121	-0.269	0.789
	Prof. x Grp. Coh.	0.068	0.678	0.015	0.1	0.921
	Mot. Int. x Grp. Coh.	-1.928	0.819	-0.359	-2.355	0.024
Shift Conversation	(Constant)	3.764	0.188		20.035	0.002
	Proficiency (baseline)	0.758	0.725	1.273	1.045	0.406
	Mot. Int. Baseline	-0.111	0.921	-0.114	-0.12	0.915
	Group cohesion	0.971	0.985	0.473	0.986	0.428
	Prof. x Mot. Int.	-2.427	5.214	-2.012	-0.466	0.687
	Prof. x Grp. Coh.	-5.544	2.836	-1.924	-1.955	0.19
	Mot. Int. x Grp. Coh.	-5.565	7.863	-0.714	-0.708	0.552
	Prof. x MI x GC	9.469	23.908	1.765	0.396	0.73

Table 146. Relationship between baseline Motivational Intensity, Group Cohesion and self-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.214	0.051		63.181	<.001
	Frequency (baseline)	0.668	0.054	0.725	12.294	<.001
	Mot. Int. Baseline	-0.044	0.167	-0.017	-0.263	0.793
	Group cohesion	0.313	0.135	0.148	2.327	0.021
	Freq. x Mot. Int.	0.03	0.175	0.011	0.17	0.866
	Freq. x Grp. Coh.	0.128	0.131	0.058	0.975	0.331
	Mot. Int. x Grp. Coh.	-0.369	0.476	-0.054	-0.776	0.439
	Freq. x MI x GC	-0.736	0.596	-0.082	-1.235	0.219
Shift Conversation	(Constant)	3.711	0.046		80.316	<.001
	Frequency (baseline)	0.674	0.053	0.713	12.654	<.001
	Mot. Int. Baseline	0.445	0.134	0.214	3.332	0.001
	Group cohesion	0.136	0.137	0.056	0.987	0.325
	Freq. x Mot. Int.	-0.388	0.187	-0.127	-2.075	0.04
	Freq. x Grp. Coh.	0.131	0.179	0.047	0.73	0.466
	Mot. Int. x Grp. Coh.	-0.795	0.44	-0.126	-1.808	0.073
	Freq. x MI x GC	2.748	1.051	0.204	2.615	0.01
Shift Writing	(Constant)	4.06	0.059		68.51	<.001
	Frequency (baseline)	0.674	0.143	0.771	4.724	<.001
	Mot. Int. Baseline	0.281	0.327	0.082	0.859	0.394
	Group cohesion	0.131	0.326	0.045	0.4	0.69
	Freq. x Mot. Int.	-0.382	1.042	-0.079	-0.367	0.715
	Freq. x Grp. Coh.	-0.135	1.119	-0.035	-0.121	0.904
	Mot. Int. x Grp. Coh.	1.727	2.154	0.109	0.801	0.426
	Freq. x MI x GC	-1.921	8.619	-0.075	-0.223	0.824

Table 147. Relationship between baseline Motivational Intensity, Group Cohesion and supervisor-report measure of English frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.186	0.173		18.467	0
	Frequency (baseline)	0.971	0.605	0.921	1.606	0.117
	Mot. Int. Baseline	-0.13	0.815	-0.056	-0.16	0.874
	Group cohesion	0.966	0.886	0.424	1.091	0.282
	Freq. x Mot. Int.	-2.443	3.628	-0.502	-0.674	0.505
	Freq. x Grp. Coh.	-1.261	1.028	-0.373	-1.227	0.227
	Mot. Int. x Grp. Coh.	-2.972	5.178	-0.575	-0.574	0.569
	Freq. x MI x GC	3.361	5.463	0.443	0.615	0.542
Shift Conversation	(Constant)	3.451	0.809		4.268	0.024
	Frequency (baseline)	2.245	2.032	3.119	1.105	0.35
	Mot. Int. Baseline	-4.019	6.905	-2.767	-0.582	0.601
	Group cohesion	4.052	3.829	1.326	1.058	0.368
	Freq. x Mot. Int.	-1.981	4.761	-1.468	-0.416	0.705
	Freq. x Grp. Coh.	-11.588	14.297	-3.913	-0.811	0.477
	Mot. Int. x Grp. Coh.	30.663	56.903	2.642	0.539	0.627

Table 148. Relationship between baseline Motivational Intensity, Group Cohesion and self-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.388	0.045		75.795	<.001
	Can Do (baseline)	0.681	0.052	0.764	13.089	<.001
	Mot. Int. Baseline	-0.016	0.139	-0.007	-0.112	0.911
	Group cohesion	0.299	0.117	0.156	2.567	0.011
	Can Do x Mot. Int.	-0.133	0.188	-0.043	-0.706	0.481
	Can Do x Grp. Coh.	0.028	0.152	0.012	0.187	0.852
	Mot. Int. x Grp. Coh.	-0.543	0.332	-0.1	-1.633	0.105
	Can Do x MI x GC	-0.501	0.407	-0.08	-1.229	0.221
Shift Conversation	(Constant)	3.941	0.042		92.923	<.001
	Can Do (baseline)	0.421	0.053	0.529	7.937	<.001
	Mot. Int. Baseline	0.38	0.147	0.237	2.584	0.011
	Group cohesion	0.264	0.126	0.143	2.092	0.038
	Can Do x Mot. Int.	0.018	0.16	0.012	0.115	0.909
	Can Do x Grp. Coh.	-0.04	0.158	-0.017	-0.254	0.8
	Mot. Int. x Grp. Coh.	0.203	0.397	0.042	0.51	0.611
	Can Do x MI x GC	0.998	0.634	0.167	1.574	0.118

Table 149. Relationship between baseline Motivational Intensity, Group Cohesion and supervisor-report measure of workplace effectiveness (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	4.023	0.815		4.935	0
	Can Do (baseline)	0.229	0.895	0.213	0.256	0.8
	Mot. Int. Baseline	-2.463	4.96	-0.983	-0.497	0.623
	Group cohesion	-1.616	3.055	-0.597	-0.529	0.6
	Can Do x Mot. Int.	2.948	5.392	1.137	0.547	0.588
	Can Do x Grp. Coh.	0.104	1.908	0.038	0.054	0.957
	Mot. Int. x Grp. Coh.	6.499	18.584	1.149	0.35	0.729
	Can Do x MI x GC	-4.269	10.843	-1.047	-0.394	0.696
Shift Conversation	(Constant)	6.128	1.343		4.562	0.02
	Can Do (baseline)	9.17	4.708	20.091	1.948	0.147
	Mot. Int. Baseline	-38.156	20.062	-39.684	-1.902	0.153
	Group cohesion	-9.667	6.38	-4.766	-1.515	0.227
	Can Do x Mot. Int.	-53.675	29.19	-51.101	-1.839	0.163
	Can Do x Grp. Coh.	-39.64	20.087	-24.49	-1.973	0.143
	Mot. Int. x Grp. Coh.	165.441	84.785	21.957	1.951	0.146
	Can Do x MI x GC	227.31	126.745	42.02	1.793	0.171

Table 150. Relationship between baseline Motivational Intensity, Group Cohesion and self-report measure of workplace effectiveness (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	5.379	0.101		53.103	<.001
	Can Wr. (baseline)	0.48	0.12	0.517	3.993	<.001
	Mot. Int. Baseline	-0.256	0.607	-0.065	-0.422	0.674
	Group cohesion	0.445	0.601	0.129	0.741	0.461
	Can Wr. x Mot. Int.	0.045	0.743	0.012	0.06	0.952
	Can Wr. x Grp. Coh.	-1	0.654	-0.227	-1.529	0.131
	Mot. Int. x Grp. Coh.	0.016	4.272	0.001	0.004	0.997
	Can Wr. x MI x GC	-0.168	4.322	-0.009	-0.039	0.969

Table 151. Relationship between baseline Motivational Intensity, Group Cohesion and supervisor-report measure of English confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.624	0.749		4.838	0
	Frequency (baseline)	-0.129	1.005	-0.116	-0.128	0.898
	Mot. Int. Baseline	-3.812	4.624	-1.378	-0.824	0.415
	Group cohesion	-0.848	1.819	-0.311	-0.466	0.644
	Freq. x Mot. Int.	4.9	5.894	1.403	0.831	0.411
	Freq. x Grp. Coh.	1.324	3.788	0.335	0.35	0.729
	Mot. Int. x Grp. Coh.	7.158	10.91	1.158	0.656	0.516
	Freq. x MI x GC	-14.819	22.629	-1.35	-0.655	0.516
Shift Conversation	(Constant)	2.98	0.968		3.078	0.054
	Frequency (baseline)	-0.781	2.94	-1.043	-0.266	0.808
	Mot. Int. Baseline	7.41	14.325	4.476	0.517	0.641
	Group cohesion	-3.894	10.587	-1.118	-0.368	0.737
	Freq. x Mot. Int.	5.123	8.584	3.652	0.597	0.593
	Freq. x Grp. Coh.	10.508	23.435	3.86	0.448	0.684
	Mot. Int. x Grp. Coh.	-68.967	117.626	-5.213	-0.586	0.599

Table 152. Correlations between Group Cohesion and course attendance at the individual level

EUA Course	n	R	P
Shift Basics	148	-.009	.911
Shift Conversation	161	.061	.441
Shift Writing	75	.16	.17

Table 153. Correlations between Group Cohesion and attendance rate at the class level

EUA Course	n	R	P
Shift Basics	16	-.128	.638
Shift Conversation	18	.06	.812
Shift Writing	11	.734	.01

Table 154. Correlations between Group Cohesion and graduation rate at the class level

EUA Course	n	R	P
Shift Basics	17	.034	.898
Shift Conversation	19	-.618	.005
Shift Writing	11	.107	.755

Table 155. Regression model to predict baseline standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.61	1.32		1.977	0.05
	Age of Arrival	-0.023	0.024	-0.071	-0.944	0.347
	Integrative Orient.	0.11	0.151	0.059	0.729	0.467
	Linguistic Self-Conf	0.324	0.249	0.104	1.3	0.195
	Linguistic Anxiety	-0.231	0.12	-0.149	-1.936	0.055
Shift Conversation	(Constant)	4.336	0.862		5.032	<.001
	Age of Arrival	-0.034	0.016	-0.13	-2.135	0.034
	Integrative Orient.	0.041	0.083	0.031	0.499	0.618
	Linguistic Self-Conf	0.503	0.172	0.179	2.924	0.004
	Linguistic Anxiety	-0.287	0.074	-0.233	-3.893	<.001

Table 156. Regression model to predict baseline self-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.66	0.355		4.68	<.001
	Age of Arrival	0.002	0.007	0.02	0.311	0.756
	Integrative Orient.	0.062	0.041	0.104	1.511	0.132
	Linguistic Self-Conf	0.177	0.067	0.178	2.628	0.009
	Linguistic Anxiety	-0.106	0.033	-0.208	-3.193	0.002
Shift Conversation	(Constant)	1.955	0.273		7.165	<.001
	Age of Arrival	0.0	0.005	-0.001	-0.021	0.983
	Integrative Orient.	0.0	0.027	-0.001	-0.024	0.981
	Linguistic Self-Conf	0.207	0.054	0.217	3.818	<.001
	Linguistic Anxiety	-0.076	0.023	-0.182	-3.263	0.001
Shift Writing	(Constant)	3.506	0.553		6.345	<.001
	Age of Arrival	-0.025	0.008	-0.273	-3.112	0.002
	Integrative Orient.	0.068	0.048	0.126	1.414	0.16
	Linguistic Self-Conf	0.022	0.107	0.018	0.204	0.839
	Linguistic Anxiety	-0.13	0.037	-0.309	-3.491	0.001

Table 157. Regression model to predict baseline supervisor-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.26	1.064		2.123	0.036
	Age of Arrival	-0.007	0.02	-0.031	-0.326	0.745
	Integrative Orient.	0.185	0.144	0.139	1.285	0.201
	Linguistic Self-Conf	0.09	0.214	0.044	0.42	0.675
	Linguistic Anxiety	-0.172	0.101	-0.171	-1.708	0.091
Shift Conversation	(Constant)	2.778	0.929		2.99	0.004
	Age of Arrival	-0.003	0.015	-0.018	-0.165	0.869
	Integrative Orient.	0.06	0.085	0.085	0.711	0.479
	Linguistic Self-Conf	0.013	0.196	0.008	0.068	0.946
	Linguistic Anxiety	-0.02	0.075	-0.029	-0.261	0.794
Shift Writing	(Constant)	4.282	1.385		3.092	0.007
	Age of Arrival	0.01	0.022	0.105	0.441	0.665
	Integrative Orient.	0.131	0.148	0.224	0.886	0.388
	Linguistic Self-Conf	-0.345	0.304	-0.275	-1.133	0.273
	Linguistic Anxiety	-0.057	0.115	-0.12	-0.492	0.629

Table 158. Regression model to predict baseline self-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.01	0.525		3.83	<.001
	Age of Arrival	-0.017	0.01	-0.107	-1.673	0.096
	Integrative Orient.	-0.032	0.061	-0.036	-0.529	0.597
	Linguistic Self-Conf	0.371	0.1	0.253	3.718	<.001
	Linguistic Anxiety	-0.088	0.049	-0.116	-1.786	0.075
Shift Conversation	(Constant)	1.584	0.405		3.909	<.001
	Age of Arrival	0.003	0.007	0.02	0.362	0.717
	Integrative Orient.	0.086	0.04	0.123	2.18	0.03
	Linguistic Self-Conf	0.363	0.08	0.252	4.518	<.001
	Linguistic Anxiety	-0.102	0.035	-0.16	-2.939	0.004
Shift Writing	(Constant)	1.818	0.758		2.399	0.018
	Age of Arrival	-0.018	0.011	-0.149	-1.616	0.109
	Integrative Orient.	0.083	0.066	0.117	1.251	0.213
	Linguistic Self-Conf	0.411	0.147	0.252	2.787	0.006
	Linguistic Anxiety	0.01	0.051	0.019	0.203	0.84

Table 159. Regression model to predict baseline supervisor-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.542	0.658		2.345	0.021
	Age of Arrival	-0.016	0.013	-0.111	-1.258	0.211
	Integrative Orient.	0.225	0.09	0.252	2.513	0.013
	Linguistic Self-Conf	0.263	0.133	0.195	1.975	0.051
	Linguistic Anxiety	-0.156	0.063	-0.228	-2.477	0.015
Shift Conversation	(Constant)	1.94	0.885		2.191	0.031
	Age of Arrival	0.003	0.015	0.023	0.209	0.835
	Integrative Orient.	0.024	0.082	0.035	0.296	0.768
	Linguistic Self-Conf	0.214	0.187	0.134	1.148	0.254
	Linguistic Anxiety	-0.033	0.072	-0.051	-0.463	0.644
Shift Writing	(Constant)	5.514	1.183		4.661	<.001
	Age of Arrival	0.018	0.019	0.169	0.957	0.352
	Integrative Orient.	0.413	0.126	0.613	3.264	0.005
	Linguistic Self-Conf	-0.736	0.26	-0.509	-2.83	0.012
	Linguistic Anxiety	-0.221	0.098	-0.408	-2.247	0.038

Table 160. Regression model to predict baseline self-report measures of workplace ability (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.219	0.506		4.386	<.001
	Age of Arrival	-0.012	0.01	-0.079	-1.251	0.212
	Integrative Orient.	-0.007	0.059	-0.008	-0.113	0.91
	Linguistic Self-Conf	0.34	0.096	0.238	3.532	0.001
	Linguistic Anxiety	-0.139	0.047	-0.189	-2.924	0.004
Shift Conversation	(Constant)	2.12	0.381		5.563	<.001
	Age of Arrival	-0.005	0.007	-0.042	-0.762	0.447
	Integrative Orient.	0.066	0.037	0.1	1.786	0.075
	Linguistic Self-Conf	0.349	0.076	0.257	4.622	<.001
	Linguistic Anxiety	-0.116	0.033	-0.194	-3.563	<.001

Table 161. Regression model to predict baseline supervisor-report measures of workplace ability (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.054	0.755		2.719	0.008
	Age of Arrival	-0.017	0.015	-0.106	-1.146	0.255
	Integrative Orient.	0.292	0.104	0.293	2.816	0.006
	Linguistic Self-Conf	0.125	0.152	0.084	0.824	0.412
	Linguistic Anxiety	-0.204	0.072	-0.275	-2.836	0.006
Shift Conversation	(Constant)	1.963	0.932		2.106	0.038
	Age of Arrival	0.01	0.016	0.07	0.636	0.527
	Integrative Orient.	0.098	0.089	0.132	1.097	0.276
	Linguistic Self-Conf	0.186	0.198	0.111	0.939	0.35
	Linguistic Anxiety	-0.048	0.075	-0.072	-0.642	0.523

Table 162. Regression model to predict baseline self-report measures of workplace ability (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	4.784	0.929		5.15	<.001
	Age of Arrival	-0.021	0.014	-0.146	-1.529	0.129
	Integrative Orient.	0.079	0.082	0.094	0.967	0.336
	Linguistic Self-Conf	0.09	0.181	0.047	0.498	0.619
	Linguistic Anxiety	-0.097	0.063	-0.148	-1.529	0.129

Table 163. Regression model to predict baseline supervisor-report measures of workplace ability (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	4.14	2.459		1.684	0.116
	Age of Arrival	0.044	0.053	0.23	0.826	0.424
	Integrative Orient.	0.386	0.281	0.395	1.372	0.193
	Linguistic Self-Conf	-0.425	0.605	-0.208	-0.703	0.494
	Linguistic Anxiety	-0.087	0.202	-0.117	-0.429	0.675

Table 164. Regression model to predict baseline supervisor-report measure of confidence

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.852	0.688		2.694	0.008
	Age of Arrival	-0.026	0.013	-0.175	-1.95	0.054
	Integrative Orient.	0.134	0.094	0.145	1.429	0.156
	Linguistic Self-Conf	0.263	0.139	0.189	1.892	0.061
	Linguistic Anxiety	-0.173	0.066	-0.246	-2.631	0.01
Shift Conversation	(Constant)	2.913	0.94		3.1	0.003
	Age of Arrival	-0.018	0.016	-0.128	-1.17	0.245
	Integrative Orient.	0.105	0.087	0.143	1.209	0.23
	Linguistic Self-Conf	0.003	0.198	0.002	0.013	0.99
	Linguistic Anxiety	-0.034	0.076	-0.05	-0.451	0.653
Shift Writing	(Constant)	7.543	1.427		5.287	<.001
	Age of Arrival	0.018	0.023	0.127	0.793	0.439
	Integrative Orient.	0.516	0.152	0.578	3.384	0.004
	Linguistic Self-Conf	-1.203	0.314	-0.628	-3.834	0.001
	Linguistic Anxiety	-0.321	0.119	-0.448	-2.707	0.015

Table 165. Regression model to predict end of program standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.108	2.191		0.962	0.339
	BEST Baseline	0.721	0.059	0.776	12.18	<.001
	Age of Arrival	-0.036	0.021	-0.108	-1.744	0.085
	Linguistic Self-Conf	0.063	0.207	0.019	0.302	0.763
	Linguistic Anxiety	-0.038	0.093	-0.024	-0.414	0.68
	Overall attendance	-0.005	0.048	-0.006	-0.112	0.911
	Social network	-0.238	0.248	-0.062	-0.959	0.34
	Group cohesion	0.082	0.291	0.018	0.281	0.779
	Baseline Mot. Int.	0.025	0.368	0.004	0.069	0.945
	End Mot. Int.	0.279	0.185	0.095	1.512	0.134
Shift Conversation	(Constant)	1.649	1.994		0.827	0.41
	BEST Baseline	0.715	0.075	0.65	9.51	<.001
	Age of Arrival	-0.01	0.016	-0.04	-0.616	0.539
	Linguistic Self-Conf	0.216	0.226	0.077	0.957	0.341
	Linguistic Anxiety	-0.065	0.079	-0.052	-0.821	0.413
	Overall attendance	-0.013	0.006	-0.135	-2.144	0.034
	Social Milieu	0.028	0.259	0.009	0.11	0.913
	Social Support	-0.231	0.125	-0.12	-1.84	0.068
	Group cohesion	-0.101	0.314	-0.021	-0.321	0.749
	Baseline Mot. Int.	0.048	0.346	0.012	0.137	0.891
	End Mot. Int.	0.385	0.161	0.167	2.389	0.019

Table 166. Regression model to predict end of program self-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-0.87	0.834		-1.043	0.299
	Baseline Proficiency	0.543	0.068	0.582	8.013	<.001
	Age of Arrival	0.0	0.007	0.0	-0.013	0.99
	Linguistic Self-Conf	-0.024	0.076	-0.022	-0.313	0.755
	Linguistic Anxiety	-0.004	0.032	-0.008	-0.123	0.902
	Overall attendance	0.023	0.016	0.092	1.42	0.158
	Social network	-0.148	0.091	-0.115	-1.627	0.106
	Group cohesion	0.121	0.109	0.08	1.114	0.267
	Baseline Mot. Int.	0.252	0.142	0.122	1.77	0.079
	End Mot. Int.	0.179	0.07	0.19	2.556	0.012
Shift Conversation	(Constant)	0.333	0.763		0.436	0.663
	Baseline Proficiency	0.43	0.067	0.453	6.438	<.001
	Age of Arrival	0.004	0.006	0.045	0.658	0.512
	Linguistic Self-Conf	0.009	0.089	0.009	0.102	0.919
	Linguistic Anxiety	-0.01	0.033	-0.022	-0.309	0.758
	Overall attendance	-0.002	0.003	-0.043	-0.633	0.528
	Social Milieu	-0.059	0.106	-0.049	-0.561	0.576
	Social Support	-0.095	0.052	-0.128	-1.815	0.072
	Group cohesion	0.013	0.125	0.007	0.102	0.919
	Baseline Mot. Int.	0.232	0.137	0.158	1.69	0.093
	End Mot. Int.	0.266	0.067	0.305	3.993	<.001
Shift Writing	(Constant)	1.457	1.447		1.007	0.318
	Baseline Proficiency	0.626	0.089	0.613	7.069	0
	Age of Arrival	-0.01	0.007	-0.109	-1.435	0.156
	Linguistic Self-Conf	0.155	0.11	0.114	1.413	0.163
	Linguistic Anxiety	0.04	0.033	0.094	1.213	0.23
	Overall attendance	0.015	0.01	0.117	1.494	0.14
	Social network	-0.015	0.117	-0.01	-0.131	0.896
	Group cohesion	-0.083	0.217	-0.033	-0.382	0.704
	Baseline Mot. Int.	-0.367	0.229	-0.126	-1.605	0.114
	End Mot. Int.	0.294	0.092	0.303	3.203	0.002

Table 167. Regression model to predict end of program supervisor-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-3.185	3.182		-1.001	0.324
	Baseline Proficiency	0.547	0.197	0.468	2.77	0.009
	Age of Arrival	0.014	0.022	0.095	0.646	0.523
	Linguistic Self-Conf	0.138	0.245	0.086	0.561	0.578
	Linguistic Anxiety	-0.056	0.113	-0.082	-0.493	0.625
	Overall attendance	0.026	0.038	0.094	0.682	0.5
	Social network	-0.179	0.273	-0.1	-0.654	0.517
	Group cohesion	0.512	0.348	0.218	1.473	0.15
	Baseline Mot. Int.	0.315	0.591	0.08	0.533	0.598
	End Mot. Int.	0.087	0.195	0.077	0.446	0.659

Table 168. Regression model to predict end of program self-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-0.067	1.011		-0.067	0.947
	Baseline Frequency	0.536	0.058	0.583	9.258	<.001
	Age of Arrival	-0.014	0.008	-0.094	-1.67	0.097
	Linguistic Self-Conf	-0.04	0.092	-0.027	-0.439	0.661
	Linguistic Anxiety	0.025	0.037	0.038	0.679	0.498
	Overall attendance	0.014	0.019	0.041	0.738	0.462
	Social network	-0.18	0.105	-0.101	-1.709	0.09
	Group cohesion	0.149	0.127	0.071	1.175	0.242
	Baseline Mot. Int.	-0.015	0.169	-0.005	-0.09	0.928
	End Mot. Int.	0.47	0.082	0.36	5.717	<.001
Shift Conversation	(Constant)	-0.231	0.842		-0.274	0.784
	Baseline Frequency	0.55	0.057	0.586	9.64	<.001
	Age of Arrival	0.003	0.007	0.022	0.397	0.692
	Linguistic Self-Conf	-0.019	0.102	-0.013	-0.182	0.856
	Linguistic Anxiety	-0.014	0.038	-0.022	-0.376	0.708
	Overall attendance	0.004	0.003	0.064	1.16	0.248
	Social Milieu	-0.184	0.119	-0.109	-1.549	0.124
	Social Support	-0.051	0.059	-0.051	-0.866	0.388
	Group cohesion	-0.077	0.143	-0.032	-0.542	0.588
	Baseline Mot. Int.	0.41	0.157	0.201	2.61	0.01
	End Mot. Int.	0.345	0.079	0.284	4.395	<.001
Shift Writing	(Constant)	0.504	1.487		0.339	0.736
	Baseline Frequency	0.517	0.077	0.602	6.753	<.001
	Age of Arrival	-0.006	0.007	-0.054	-0.775	0.441
	Linguistic Self-Conf	-0.007	0.116	-0.005	-0.061	0.952
	Linguistic Anxiety	0.011	0.034	0.022	0.315	0.754
	Overall attendance	0.009	0.01	0.061	0.85	0.399
	Social network	-0.175	0.126	-0.1	-1.387	0.17
	Group cohesion	0.016	0.228	0.005	0.068	0.946
	Baseline Mot. Int.	0.07	0.242	0.021	0.29	0.773
	End Mot. Int.	0.391	0.106	0.351	3.675	<.001

Table 169. Regression model to predict end of program supervisor-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	7.597	2.992		2.539	0.016
	Baseline Frequency	0.235	0.174	0.227	1.349	0.186
	Age of Arrival	-0.011	0.022	-0.079	-0.514	0.611
	Linguistic Self-Conf	0.235	0.238	0.155	0.987	0.331
	Linguistic Anxiety	-0.1	0.108	-0.155	-0.923	0.362
	Overall attendance	0.034	0.036	0.132	0.939	0.355
	Social network	0.009	0.262	0.006	0.036	0.971
	Group cohesion	0.176	0.335	0.079	0.527	0.602
	Baseline Mot. Int.	-1.679	0.543	-0.447	-3.091	0.004
	End Mot. Int.	0.278	0.187	0.259	1.484	0.147

Table 170. Regression model to predict end of program self-report measure of ability to complete workplace tasks (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	-1.438	0.907		-1.587	0.115
	Baseline Can Do	0.584	0.054	0.652	10.774	<.001
	Age of Arrival	-0.001	0.008	-0.008	-0.141	0.888
	Linguistic Self-Conf	-0.052	0.083	-0.036	-0.624	0.534
	Linguistic Anxiety	-0.002	0.035	-0.003	-0.051	0.96
	Overall attendance	0.017	0.018	0.051	0.953	0.342
	Social network	0.006	0.097	0.004	0.062	0.951
	Group cohesion	0.215	0.116	0.11	1.85	0.067
	Baseline Mot. Int.	0.116	0.156	0.042	0.744	0.458
	End Mot. Int.	0.321	0.075	0.26	4.302	<.001
Shift Conversation	(Constant)	0.43	0.729		0.591	0.556
	Baseline Can Do	0.303	0.054	0.382	5.634	<.001
	Age of Arrival	-0.002	0.006	-0.017	-0.269	0.788
	Linguistic Self-Conf	-0.088	0.087	-0.078	-1.006	0.316
	Linguistic Anxiety	-0.074	0.032	-0.148	-2.346	0.02
	Overall attendance	0.003	0.003	0.071	1.138	0.257
	Social Milieu	0.056	0.103	0.043	0.541	0.59
	Social Support	-0.08	0.05	-0.104	-1.589	0.114
	Group cohesion	0.069	0.12	0.038	0.577	0.565
	Baseline Mot. Int.	0.219	0.134	0.14	1.638	0.104
	End Mot. Int.	0.382	0.067	0.412	5.742	<.001

Table 171. Regression model to predict end of program supervisor-report measure of ability to complete workplace tasks (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	6.934	3.788		1.83	0.077
	Baseline Can Do	0.387	0.22	0.351	1.763	0.088
	Age of Arrival	-0.005	0.026	-0.029	-0.183	0.856
	Linguistic Self-Conf	0.144	0.319	0.082	0.45	0.656
	Linguistic Anxiety	-0.065	0.129	-0.091	-0.503	0.619
	Overall attendance	0.008	0.047	0.029	0.179	0.859
	Social network	-0.213	0.329	-0.113	-0.646	0.523
	Group cohesion	-0.109	0.445	-0.04	-0.245	0.808
	Baseline Mot. Int.	-0.919	0.713	-0.22	-1.289	0.207
	End Mot. Int.	0.273	0.233	0.226	1.173	0.25

Table 172. Regression model to predict end of program self-report measure of ability to complete workplace tasks (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	3.791	2.409		1.574	0.121
	Baseline Can Do	0.367	0.091	0.395	4.034	<.001
	Age of Arrival	0.008	0.012	0.057	0.618	0.539
	Linguistic Self-Conf	0.072	0.186	0.039	0.386	0.701
	Linguistic Anxiety	0.047	0.055	0.082	0.859	0.394
	Overall attendance	0.004	0.018	0.02	0.203	0.839
	Social network	-0.4	0.201	-0.194	-1.995	0.051
	Group cohesion	-0.232	0.37	-0.068	-0.625	0.534
	Baseline Mot. Int.	-0.245	0.388	-0.062	-0.632	0.53
	End Mot. Int.	0.684	0.146	0.523	4.691	<.001

Table 173. Regression model to predict end of program supervisor-report measure of confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	8.2	3.873		2.117	0.042
	Baseline Can Do	0.245	0.192	0.218	1.274	0.211
	Age of Arrival	-0.018	0.028	-0.102	-0.635	0.53
	Linguistic Self-Conf	0.288	0.314	0.155	0.918	0.365
	Linguistic Anxiety	-0.044	0.146	-0.056	-0.302	0.765
	Overall attendance	-0.018	0.048	-0.055	-0.365	0.717
	Social network	-0.316	0.341	-0.152	-0.926	0.361
	Group cohesion	0.156	0.448	0.057	0.349	0.729
	Baseline Mot. Int.	-1.49	0.704	-0.324	-2.118	0.042
	End Mot. Int.	0.501	0.223	0.381	2.241	0.032

Table 174. Regression model to predict attendance

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	21.744	3.763		5.779	<.001
	Integrative Orient.	-0.146	0.256	-0.056	-0.571	0.569
	Instrumental Orient.	0.683	0.564	0.124	1.211	0.228
	Ideal Language Self	-0.442	0.293	-0.147	-1.507	0.134
	Linguistic Self-Conf	0.505	0.416	0.118	1.211	0.228
	Linguistic Anxiety	0.149	0.175	0.078	0.85	0.397
	Social network	0.531	0.505	0.105	1.051	0.295
	Group cohesion	-0.351	0.569	-0.058	-0.617	0.539
	Baseline Mot. Int.	0.007	0.698	0.001	0.01	0.992
	End Mot. Int.	0.065	0.348	0.017	0.187	0.852
Shift Conversation	(Constant)	57.704	21.722		2.656	0.009
	Integrative Orient.	-0.42	0.992	-0.037	-0.423	0.673
	Instrumental Orient.	2.49	2.637	0.102	0.944	0.347
	Ideal Language Self	1.138	1.501	0.075	0.758	0.449
	Linguistic Self-Conf	3.723	2.699	0.144	1.38	0.17
	Linguistic Anxiety	0.576	0.968	0.05	0.595	0.553
	Social Milieu	0.351	3.47	0.012	0.101	0.92
	Social Support	-0.227	1.637	-0.013	-0.139	0.89
	Group cohesion	-1.283	3.649	-0.031	-0.352	0.726
	Baseline Mot. Int.	-7.633	4.188	-0.209	-1.822	0.07
	End Mot. Int.	2.255	1.996	0.106	1.13	0.26
Shift Writing	(Constant)	5.697	18.68		0.305	0.761
	Integrative Orient.	0.441	0.598	0.101	0.736	0.464
	Instrumental Orient.	-0.015	1.243	-0.002	-0.012	0.99
	Ideal Language Self	-0.271	0.504	-0.072	-0.537	0.593
	Linguistic Self-Conf	-2.19	1.388	-0.203	-1.578	0.119
	Linguistic Anxiety	-0.281	0.439	-0.084	-0.64	0.525
	Social network	0.273	1.593	0.023	0.171	0.864
	Group cohesion	2.747	2.84	0.138	0.967	0.337
	Baseline Mot. Int.	4.57	2.981	0.196	1.533	0.13
	End Mot. Int.	0.631	1.053	0.082	0.599	0.551

Table 175. Regression model to predict end of program score on standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.629	0.414		3.935	<.001
	BEST Plus (Baseline)	0.776	0.047	0.816	16.548	<.001
	Integrative	0.082	0.098	0.041	0.839	0.403
Shift Conversation	(Constant)	2.549	0.399		6.388	<.001
	BEST Plus (Baseline)	0.727	0.061	0.7	12.012	<.001
	Integrative	-0.143	0.071	-0.118	-2.019	0.045

Table 176. Regression model to predict end of program self-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.346	0.204		6.594	<.001
	Baseline Proficiency	0.611	0.06	0.654	10.255	<.001
	Integrative	0.002	0.04	0.003	0.041	0.967
Shift Conversation	(Constant)	2.062	0.206		10.023	<.001
	Baseline Proficiency	0.475	0.066	0.487	7.188	<.001
	Integrative	-0.04	0.031	-0.088	-1.293	0.198
Shift Writing	(Constant)	1.097	0.265		4.135	<.001
	Baseline Proficiency	0.732	0.075	0.727	9.799	<.001
	Integrative	0.073	0.04	0.135	1.813	0.073

Table 177. Regression model to predict end of program supervisor-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.844	0.549		5.177	<.001
	Baseline Proficiency	0.099	0.073	0.199	1.357	0.182
	Integrative	0.018	0.137	0.019	0.132	0.896
Shift Conversation	(Constant)	4.022	0.745		5.398	0.001
	Baseline Proficiency	0.026	0.218	0.043	0.118	0.91
	Integrative	-0.13	0.104	-0.462	-1.26	0.248
Shift Writing	(Constant)	2.606	0.695		3.748	0.033
	Baseline Proficiency	0.613	0.241	0.895	2.545	0.084
	Integrative	-0.069	0.143	-0.169	-0.482	0.663

Table 178. Regression model to predict end of program self-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.978	0.243		4.027	<.001
	Baseline Frequency	0.662	0.052	0.719	12.621	<.001
	Integrative	0.102	0.049	0.117	2.057	0.042
Shift Conversation	(Constant)	1.555	0.202		7.693	<.001
	Baseline Frequency	0.613	0.055	0.656	11.152	<.001
	Integrative	0.051	0.038	0.079	1.342	0.182
Shift Writing	(Constant)	1.449	0.278		5.22	<.001
	Baseline Frequency	0.66	0.064	0.746	10.25	<.001
	Integrative	0.049	0.045	0.079	1.086	0.281

Table 179. Regression model to predict end of program supervisor-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.046	0.536		3.816	<.001
	Baseline Frequency	0.485	0.142	0.461	3.42	0.001
	Integrative	0.005	0.123	0.005	0.037	0.971
Shift Conversation	(Constant)	2.659	0.851		3.126	0.017
	Baseline Frequency	0.352	0.305	0.488	1.153	0.287
	Integrative	-0.002	0.178	-0.004	-0.009	0.993
Shift Writing	(Constant)	1.692	1.182		1.432	0.248
	Baseline Frequency	0.631	0.401	0.76	1.572	0.214
	Integrative	-0.005	0.286	-0.009	-0.018	0.987

Table 180. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.404	0.237		5.914	<.001
	Baseline Can Do	0.648	0.051	0.731	12.807	<.001
	Integrative	0.025	0.047	0.031	0.545	0.587
Shift Conversation	(Constant)	2.567	0.21		12.215	<.001
	Baseline Can Do	0.387	0.053	0.484	7.233	<.001
	Integrative	0.031	0.034	0.063	0.938	0.35

Table 181. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.331	0.59		3.953	<.001
	Baseline Can Do	0.592	0.136	0.561	4.35	<.001
	Integrative	-0.066	0.134	-0.063	-0.492	0.626
Shift Conversation	(Constant)	3.827	0.599		6.384	<.001
	Baseline Can Do	0.159	0.173	0.349	0.923	0.383
	Integrative	-0.128	0.106	-0.459	-1.212	0.26

Table 182. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	3.104	0.489		6.344	<.001
	Baseline Can Write	0.436	0.088	0.487	4.975	<.001
	Integrative	0.049	0.07	0.068	0.693	0.49

Table 183. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	4.201	0.863		4.868	0.017
	Baseline Can Write	0.566	0.226	1.079	2.503	0.087
	Integrative	-0.394	0.255	-0.667	-1.546	0.22

Table 184. Regression model to predict end of program supervisor-report measure of confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.083	0.638		3.265	0.002
	Baseline Confidence	0.376	0.156	0.34	2.415	0.02
	Integrative	0.074	0.153	0.068	0.484	0.631
Shift Conversation	(Constant)	3.098	0.925		3.348	0.012
	Baseline Confidence	0.402	0.352	0.537	1.144	0.29
	Integrative	-0.206	0.225	-0.431	-0.917	0.39
Shift Writing	(Constant)	2.98	0.491		6.069	0.009
	Baseline Confidence	0.576	0.111	1.059	5.201	0.014
	Integrative	-0.175	0.139	-0.258	-1.266	0.295

Table 185. Regression model to predict end of program score on standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.362	0.91		4.793	<.001
	BEST Plus (Baseline)	0.758	0.046	0.797	16.36	<.001
	Instrumental	-0.514	0.19	-0.132	-2.704	0.008
Shift Conversation	(Constant)	3.228	0.82		3.937	<.001
	BEST Plus (Baseline)	0.717	0.06	0.69	11.859	<.001
	Instrumental	-0.252	0.159	-0.092	-1.578	0.117

Table 186. Regression model to predict end of program self-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.029	0.445		4.562	<.001
	Baseline Proficiency	0.595	0.06	0.637	9.951	<.001
	Instrumental	-0.139	0.086	-0.103	-1.612	0.109
Shift Conversation	(Constant)	2.036	0.37		5.508	<.001
	Baseline Proficiency	0.476	0.065	0.493	7.329	<.001
	Instrumental	-0.027	0.067	-0.027	-0.401	0.689
Shift Writing	(Constant)	1.485	0.45		3.304	0.001
	Baseline Proficiency	0.736	0.076	0.73	9.628	<.001
	Instrumental	-0.029	0.082	-0.027	-0.354	0.724

Table 187. Regression model to predict end of program supervisor-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.272	1.193		2.744	0.009
	Baseline Proficiency	0.1	0.073	0.202	1.384	0.173
	Instrumental	-0.081	0.26	-0.045	-0.311	0.757
Shift Conversation	(Constant)	5.515	1.126		4.899	0.002
	Baseline Proficiency	-0.135	0.188	-0.226	-0.715	0.498
	Instrumental	-0.318	0.181	-0.556	-1.76	0.122
Shift Writing	(Constant)	3.863	2.857		1.352	0.269
	Baseline Proficiency	0.571	0.217	0.834	2.628	0.078
	Instrumental	-0.295	0.595	-0.157	-0.495	0.654

Table 188. Regression model to predict end of program self-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.786	0.577		1.363	0.175
	Baseline Frequency	0.678	0.055	0.737	12.435	<.001
	Instrumental	0.116	0.113	0.061	1.032	0.304
Shift Conversation	(Constant)	1.564	0.402		3.891	<.001
	Baseline Frequency	0.631	0.053	0.676	11.876	<.001
	Instrumental	0.025	0.079	0.018	0.319	0.75
Shift Writing	(Constant)	2.107	0.444		4.743	<.001
	Baseline Frequency	0.676	0.064	0.764	10.564	<.001
	Instrumental	-0.12	0.089	-0.098	-1.355	0.179

Table 189. Regression model to predict end of program supervisor-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.179	1.101		3.797	<.001
	Baseline Frequency	0.453	0.134	0.43	3.374	0.002
	Instrumental	-0.448	0.22	-0.26	-2.037	0.048
Shift Conversation	(Constant)	2.021	1.64		1.233	0.257
	Baseline Frequency	0.373	0.24	0.519	1.555	0.164
	Instrumental	0.128	0.284	0.151	0.453	0.665
Shift Writing	(Constant)	3.294	4.864		0.677	0.547
	Baseline Frequency	0.666	0.33	0.803	2.017	0.137
	Instrumental	-0.368	1.082	-0.135	-0.34	0.757

Table 190. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.244	0.529		2.35	0.02
	Baseline Can Do	0.654	0.052	0.737	12.618	<.001
	Instrumental	0.053	0.103	0.03	0.51	0.611
Shift Conversation	(Constant)	2.693	0.396		6.804	<.001
	Baseline Can Do	0.374	0.054	0.467	6.952	<.001
	Instrumental	0.004	0.073	0.003	0.05	0.96

Table 191. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.467	1.186		3.767	0.001
	Baseline Can Do	0.528	0.132	0.5	3.995	<.001
	Instrumental	-0.489	0.234	-0.261	-2.087	0.043
Shift Conversation	(Constant)	5.403	0.875		6.178	<.001
	Baseline Can Do	0.034	0.125	0.075	0.274	0.791
	Instrumental	-0.356	0.157	-0.622	-2.263	0.053

Table 192. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	3.463	0.793		4.369	<.001
	Baseline Can Write	0.437	0.088	0.487	4.938	<.001
	Instrumental	-0.04	0.138	-0.029	-0.291	0.772

Table 193. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	12.139	3.099		3.916	0.03
	Baseline Can Write	0.482	0.133	0.92	3.638	0.036
	Instrumental	-1.91	0.688	-0.702	-2.776	0.069

Table 194. Regression model to predict end of program supervisor-report measure of confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.462	1.321		3.377	0.002
	Baseline Confidence	0.387	0.149	0.351	2.59	0.013
	Instrumental	-0.469	0.279	-0.227	-1.68	0.1
Shift Conversation	(Constant)	4.994	1.826		2.735	0.029
	Baseline Confidence	0.129	0.255	0.172	0.506	0.629
	Instrumental	-0.39	0.33	-0.402	-1.181	0.276
Shift Writing	(Constant)	6.483	2.33		2.782	0.069
	Baseline Confidence	0.545	0.087	1.001	6.242	0.008
	Instrumental	-0.855	0.502	-0.273	-1.704	0.187

Table 195. Regression model to predict end of program score on standardized measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.884	1.163		1.62	0.108
	BEST Plus (Baseline)	0.739	0.049	0.823	15.054	<.001
	Group cohesion	0.008	0.244	0.002	0.031	0.975
Shift Conversation	(Constant)	1.473	1.437		1.025	0.307
	BEST Plus (Baseline)	0.773	0.066	0.724	11.733	<.001
	Group cohesion	0.073	0.292	0.015	0.249	0.804

Table 196. Regression model to predict end of program self-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.359	0.464		0.773	0.441
	Baseline Proficiency	0.609	0.06	0.641	10.231	<.001
	Group cohesion	0.211	0.096	0.138	2.196	0.03
Shift Conversation	(Constant)	1.211	0.595		2.037	0.043
	Baseline Proficiency	0.473	0.065	0.498	7.236	<.001
	Group cohesion	0.15	0.119	0.086	1.254	0.212
Shift Writing	(Constant)	-0.482	0.97		-0.497	0.621
	Baseline Proficiency	0.774	0.079	0.747	9.841	<.001
	Group cohesion	0.352	0.195	0.137	1.806	0.075

Table 197. Regression model to predict end of program supervisor-report measure of proficiency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	-1.356	1.339		-1.012	0.317
	Baseline Proficiency	0.641	0.136	0.549	4.706	<.001
	Group cohesion	0.6	0.284	0.246	2.113	0.04
Shift Conversation	(Constant)	1.603	3.923		0.409	0.695
	Baseline Proficiency	-0.165	0.258	-0.278	-0.641	0.542
	Group cohesion	0.542	0.89	0.264	0.609	0.562
Shift Writing	(Constant)	1.271	5.918		0.215	0.844
	Baseline Proficiency	0.574	0.23	0.838	2.49	0.088
	Group cohesion	0.239	1.157	0.069	0.206	0.85

Table 198. Regression model to predict end of program self-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	-0.055	0.58		-0.094	0.925
	Baseline Frequency	0.692	0.051	0.737	13.547	<.001
	Group cohesion	0.282	0.121	0.126	2.324	0.022
Shift Conversation	(Constant)	0.879	0.685		1.283	0.201
	Baseline Frequency	0.645	0.055	0.682	11.763	<.001
	Group cohesion	0.157	0.14	0.065	1.125	0.262
Shift Writing	(Constant)	-0.317	1.04		-0.305	0.762
	Baseline Frequency	0.653	0.065	0.747	10.06	<.001
	Group cohesion	0.401	0.217	0.137	1.847	0.069

Table 199. Regression model to predict end of program supervisor-report measure of frequency

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.398	1.433		0.975	0.335
	Baseline Frequency	0.491	0.136	0.471	3.595	0.001
	Group cohesion	0.137	0.296	0.061	0.462	0.646
Shift Conversation	(Constant)	0.775	4.883		0.159	0.878
	Baseline Frequency	0.33	0.24	0.459	1.373	0.212
	Group cohesion	0.4	1.021	0.131	0.392	0.707
Shift Writing	(Constant)	-11.293	7.444		-1.517	0.227
	Baseline Frequency	0.783	0.238	0.943	3.286	0.046
	Group cohesion	2.511	1.431	0.504	1.755	0.178

Table 200. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	-0.289	0.509		-0.568	0.571
	Baseline Can Do	0.675	0.048	0.748	14.197	<.001
	Group cohesion	0.361	0.105	0.181	3.443	0.001
Shift Conversation	(Constant)	1.261	0.611		2.065	0.041
	Baseline Can Do	0.421	0.053	0.529	8.01	<.001
	Group cohesion	0.262	0.122	0.142	2.147	0.033

Table 201. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.561	1.719		1.489	0.144
	Baseline Can Do	0.631	0.139	0.572	4.527	<.001
	Group cohesion	-0.128	0.354	-0.046	-0.361	0.72
Shift Conversation	(Constant)	8.651	3.029		2.857	0.021
	Baseline Can Do	0.079	0.14	0.172	0.562	0.59
	Group cohesion	-1.016	0.622	-0.501	-1.632	0.141

Table 202. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	0.405	1.767		0.229	0.819
	Baseline Can Write	0.447	0.095	0.481	4.69	<.001
	Group cohesion	0.575	0.353	0.167	1.628	0.108

Table 203. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	-2.303	11.184		-0.206	0.85
	Baseline Can Write	0.375	0.23	0.716	1.629	0.202
	Group cohesion	1.177	2.192	0.236	0.537	0.628

Table 204. Regression model to predict end of program supervisor-report measure of confidence

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.991	1.847		0.536	0.594
	Baseline Confidence	0.427	0.151	0.387	2.816	0.007
	Group cohesion	0.256	0.377	0.093	0.678	0.501
Shift Conversation	(Constant)	8.828	5.841		1.511	0.174
	Baseline Confidence	0.217	0.259	0.29	0.839	0.429
	Group cohesion	-1.193	1.205	-0.343	-0.991	0.355
Shift Writing	(Constant)	0.776	7.424		0.105	0.923
	Baseline Confidence	0.522	0.137	0.959	3.8	0.032
	Group cohesion	0.346	1.448	0.06	0.239	0.827

Table 205. Regression model to predict baseline motivational intensity

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.656	0.088		53.121	<.001
	Integrative	0.048	0.023	0.135	2.126	0.035
Shift Conversation	(Constant)	4.851	0.061		78.954	<.001
	Integrative	0.008	0.016	0.027	0.485	0.628
Shift Writing	(Constant)	4.667	0.106		43.878	<.001
	Integrative	0.055	0.028	0.178	2.0	0.048

Table 206. Regression model to predict baseline motivational intensity

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.447	0.222		15.554	<.001
	Instrumental	0.301	0.048	0.375	6.297	<.001
Shift Conversation	(Constant)	3.802	0.156		24.403	<.001
	Instrumental	0.234	0.034	0.364	6.954	<.001
Shift Writing	(Constant)	4.143	0.21		19.721	<.001
	Instrumental	0.165	0.047	0.302	3.5	0.001

Table 207. Regression model to predict end of program motivational intensity

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.93	0.221		17.818	<.001
	Integrative	0.077	0.056	0.114	1.387	0.168
Shift Conversation	(Constant)	3.973	0.153		26.027	<.001
	Integrative	0.11	0.04	0.205	2.75	0.007
Shift Writing	(Constant)	4.273	0.249		17.165	<.001
	Integrative	0.074	0.065	0.13	1.137	0.259

Table 208. Regression model to predict end of program motivational intensity

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.825	0.552		6.935	<.001
	Instrumental	0.088	0.12	0.061	0.731	0.466
Shift Conversation	(Constant)	3.856	0.401		9.616	<.001
	Instrumental	0.114	0.087	0.098	1.302	0.195
Shift Writing	(Constant)	4.135	0.574		7.205	<.001
	Instrumental	0.091	0.127	0.082	0.717	0.476

Table 209. Regression model to predict end of program motivational intensity

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.998	0.6		3.328	0.001
	Group cohesion	0.473	0.128	0.292	3.706	<.001
Shift Conversation	(Constant)	1.508	0.707		2.134	0.034
	Group cohesion	0.592	0.148	0.301	4.006	<.001
Shift Writing	(Constant)	-1.474	1.308		-1.127	0.264
	Group cohesion	1.231	0.268	0.474	4.6	<.001

Table 210. Regression model to predict end of program score on standardized measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.92	1.378		1.393	0.166
	BEST Plus (Baseline)	0.776	0.047	0.816	16.482	<.001
	Integrative	0.084	0.099	0.042	0.853	0.395
	Baseline Mot Int.	-0.062	0.279	-0.011	-0.222	0.825
Shift Conversation	(Constant)	1.613	1.26		1.28	0.203
	BEST Plus (Baseline)	0.727	0.061	0.7	11.992	<.001
	Integrative	-0.145	0.071	-0.119	-2.036	0.044
	Baseline Mot Int.	0.192	0.246	0.046	0.783	0.435

Table 211. Regression model to predict end of program self-report measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.361	0.591		0.61	0.543
	Baseline Proficiency	0.614	0.059	0.657	10.372	<.001
	Integrative	-0.004	0.04	-0.006	-0.09	0.928
	Baseline Mot. Int.	0.206	0.116	0.112	1.773	0.078
Shift Conversation	(Constant)	0.973	0.543		1.792	0.075
	Baseline Proficiency	0.483	0.065	0.495	7.369	<.001
	Integrative	-0.043	0.031	-0.094	-1.403	0.162
	Baseline Mot. Int.	0.221	0.102	0.145	2.165	0.032
Shift Writing	(Constant)	2.366	0.957		2.471	0.016
	Baseline Proficiency	0.726	0.074	0.721	9.75	<.001
	Integrative	0.077	0.04	0.141	1.912	0.059
	Baseline Mot. Int.	-0.257	0.186	-0.102	-1.379	0.172

Table 212. Regression model to predict end of program supervisor-report measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.554	1.78		0.311	0.757
	Baseline Proficiency	0.1	0.072	0.201	1.385	0.173
	Integrative	0.016	0.136	0.017	0.115	0.909
	Baseline Mot. Int.	0.471	0.349	0.196	1.351	0.183
Shift Conversation	(Constant)	5.799	1.786		3.248	0.018
	Baseline Proficiency	0.03	0.215	0.051	0.141	0.892
	Integrative	-0.06	0.121	-0.213	-0.5	0.635
	Baseline Mot. Int.	-0.432	0.395	-0.443	-1.092	0.317

Table 213. Regression model to predict end of program self-report measure of frequency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.74	0.753		0.982	0.328
	Baseline Frequency	0.662	0.053	0.719	12.584	0
	Integrative	0.101	0.05	0.116	2.024	0.045
	Baseline Mot. Int.	0.05	0.149	0.019	0.333	0.739
Shift Conversation	(Constant)	0.004	0.62		0.007	0.995
	Baseline Frequency	0.616	0.054	0.658	11.396	0
	Integrative	0.047	0.037	0.072	1.248	0.214
	Baseline Mot. Int.	0.319	0.121	0.149	2.641	0.009
Shift Writing	(Constant)	1.516	1.057		1.435	0.155
	Baseline Frequency	0.66	0.065	0.746	10.185	0
	Integrative	0.049	0.046	0.079	1.081	0.283
	Baseline Mot. Int.	-0.014	0.209	-0.005	-0.066	0.948

Table 214. Regression model to predict end of program supervisor-report measure of frequency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	5.965	1.492		3.998	<.001
	Baseline Frequency	0.476	0.132	0.453	3.602	0.001
	Integrative	0.01	0.114	0.011	0.087	0.931
	Baseline Mot. Int.	-0.804	0.288	-0.344	-2.788	0.008
Shift Conversation	(Constant)	1.678	2.705		0.62	0.558
	Baseline Frequency	0.346	0.326	0.48	1.061	0.329
	Integrative	-0.039	0.213	-0.092	-0.182	0.862
	Baseline Mot. Int.	0.24	0.623	0.165	0.385	0.714

Table 215. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.548	0.69		0.795	0.428
	Baseline Can Do	0.646	0.05	0.729	12.799	<.001
	Integrative	0.021	0.047	0.026	0.457	0.649
	Baseline Mot. Int.	0.181	0.137	0.075	1.321	0.189
Shift Conversation	(Constant)	1.592	0.569		2.801	0.006
	Baseline Can Do	0.38	0.053	0.476	7.141	<.001
	Integrative	0.029	0.033	0.058	0.878	0.381
	Baseline Mot. Int.	0.206	0.112	0.122	1.842	0.067

Table 216. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.834	1.777		1.595	0.118
	Baseline Can Do	0.583	0.141	0.552	4.145	<.001
	Integrative	-0.064	0.135	-0.062	-0.473	0.639
	Baseline Mot. Int.	-0.1	0.332	-0.04	-0.301	0.765
Shift Conversation	(Constant)	3.919	1.735		2.259	0.058
	Baseline Can Do	0.164	0.199	0.359	0.822	0.438
	Integrative	-0.126	0.124	-0.449	-1.013	0.345
	Baseline Mot. Int.	-0.025	0.44	-0.026	-0.057	0.956

Table 217. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by Baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	3.47	1.65		2.102	0.039
	Baseline Can Write	0.436	0.088	0.487	4.941	<.001
	Integrative	0.05	0.071	0.07	0.704	0.483
	Baseline Mot. Int.	-0.075	0.323	-0.023	-0.232	0.817

Table 218. Regression model to predict end of program supervisor-report measure of confidence (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.428	1.987		2.229	0.031
	Baseline Confidence	0.373	0.155	0.338	2.413	0.02
	Integrative	0.077	0.152	0.071	0.505	0.616
	Baseline Mot. Int.	-0.482	0.387	-0.172	-1.246	0.22
Shift Conversation	(Constant)	4.488	3.165		1.418	0.206
	Baseline Confidence	0.419	0.375	0.56	1.118	0.306
	Integrative	-0.157	0.261	-0.328	-0.602	0.569
	Baseline Mot. Int.	-0.343	0.743	-0.207	-0.462	0.66

Table 219. Regression model to predict end of program score on standardized measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.517	1.411		2.493	0.014
	BEST Plus (Baseline)	0.756	0.046	0.796	16.305	<.001
	Instrumental	-0.565	0.201	-0.145	-2.808	0.006
	Baseline Mot Int.	0.225	0.286	0.04	0.785	0.434
Shift Conversation	(Constant)	1.803	1.266		1.424	0.157
	BEST Plus (Baseline)	0.715	0.06	0.687	11.853	<.001
	Instrumental	-0.345	0.171	-0.126	-2.018	0.045
	Baseline Mot Int.	0.382	0.259	0.092	1.474	0.143

Table 220. Regression model to predict end of program self-report measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.937	0.625		1.499	0.136
	Baseline Proficiency	0.589	0.059	0.631	10.028	<.001
	Instrumental	-0.208	0.089	-0.154	-2.325	0.021
	Baseline Mot. Int.	0.293	0.12	0.16	2.445	0.016
Shift Conversation	(Constant)	1.008	0.544		1.852	0.066
	Baseline Proficiency	0.476	0.064	0.493	7.446	<.001
	Instrumental	-0.093	0.071	-0.093	-1.313	0.191
	Baseline Mot. Int.	0.273	0.107	0.18	2.54	0.012
Shift Writing	(Constant)	2.52	0.989		2.548	0.013
	Baseline Proficiency	0.732	0.076	0.727	9.6	<.001
	Instrumental	-0.005	0.084	-0.005	-0.062	0.951
	Baseline Mot. Int.	-0.23	0.196	-0.091	-1.174	0.244

Table 221. Regression model to predict end of program supervisor-report measure of proficiency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.043	1.741		0.599	0.552
	Baseline Proficiency	0.106	0.071	0.212	1.484	0.145
	Instrumental	-0.316	0.288	-0.177	-1.094	0.28
	Baseline Mot. Int.	0.673	0.39	0.279	1.725	0.092
Shift Conversation	(Constant)	6.372	1.526		4.175	0.006
	Baseline Proficiency	-0.069	0.207	-0.115	-0.332	0.751
	Instrumental	-0.209	0.224	-0.366	-0.935	0.386
	Baseline Mot. Int.	-0.331	0.388	-0.339	-0.853	0.426

Table 222. Regression model to predict end of program self-report measure of frequency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.694	0.826		0.841	0.402
	Baseline Frequency	0.678	0.055	0.737	12.349	<.001
	Instrumental	0.11	0.119	0.058	0.93	0.354
	Baseline Mot. Int.	0.025	0.159	0.009	0.155	0.877
Shift Conversation	(Constant)	0.263	0.625		0.42	0.675
	Baseline Frequency	0.633	0.052	0.677	12.117	<.001
	Instrumental	-0.056	0.083	-0.04	-0.675	0.5
	Baseline Mot. Int.	0.342	0.127	0.161	2.687	0.008
Shift Writing	(Constant)	1.774	1.057		1.677	0.097
	Baseline Frequency	0.676	0.064	0.765	10.512	<.001
	Instrumental	-0.128	0.092	-0.104	-1.391	0.168
	Baseline Mot. Int.	0.074	0.214	0.026	0.347	0.729

Table 223. Regression model to predict end of program supervisor-report measure of frequency (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	6.341	1.494		4.245	0
	Baseline Frequency	0.464	0.13	0.441	3.577	0.001
	Instrumental	-0.214	0.241	-0.124	-0.887	0.38
	Baseline Mot. Int.	-0.668	0.324	-0.286	-2.061	0.045
Shift Conversation	(Constant)	1.877	2.427		0.774	0.469
	Baseline Frequency	0.357	0.321	0.496	1.114	0.308
	Instrumental	0.105	0.405	0.124	0.26	0.804
	Baseline Mot. Int.	0.063	0.733	0.044	0.087	0.934

Table 224. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.593	0.74		0.802	0.424
	Baseline Can Do	0.647	0.052	0.729	12.445	<.001
	Instrumental	0.006	0.109	0.003	0.055	0.956
	Baseline Mot. Int.	0.183	0.145	0.076	1.255	0.211
Shift Conversation	(Constant)	1.603	0.587		2.731	0.007
	Baseline Can Do	0.363	0.053	0.453	6.82	<.001
	Instrumental	-0.068	0.078	-0.062	-0.871	0.385
	Baseline Mot. Int.	0.298	0.12	0.177	2.487	0.014

Table 225. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.676	1.717		2.141	0.038
	Baseline Can Do	0.538	0.134	0.51	4.016	<.001
	Instrumental	-0.564	0.263	-0.301	-2.143	0.038
	Baseline Mot. Int.	0.226	0.352	0.09	0.642	0.524
Shift Conversation	(Constant)	4.358	1.267		3.441	0.011
	Baseline Can Do	-0.097	0.17	-0.213	-0.571	0.586
	Instrumental	-0.507	0.205	-0.886	-2.474	0.043
	Baseline Mot. Int.	0.467	0.416	0.486	1.125	0.298

Table 226. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by Baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Writing	(Constant)	3.629	1.675		2.167	0.033
	Baseline Can Write	0.437	0.089	0.487	4.908	<.001
	Instrumental	-0.036	0.144	-0.026	-0.252	0.801
	Baseline Mot. Int.	-0.038	0.333	-0.011	-0.113	0.91

Table 227. Regression model to predict end of program supervisor-report measure of confidence (Mediated by baseline Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	5.226	1.955		2.673	0.01
	Baseline Confidence	0.386	0.151	0.35	2.562	0.014
	Instrumental	-0.389	0.319	-0.189	-1.219	0.229
	Baseline Mot. Int.	-0.231	0.432	-0.083	-0.534	0.596
Shift Conversation	(Constant)	5.148	2.866		1.796	0.123
	Baseline Confidence	0.146	0.356	0.194	0.409	0.697
	Instrumental	-0.366	0.479	-0.377	-0.764	0.474
	Baseline Mot. Int.	-0.067	0.897	-0.04	-0.074	0.943

Table 228. Regression model to predict end of program score on standardized measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.7	0.766		0.914	0.363
	BEST Plus (Baseline)	0.734	0.052	0.802	14.092	<.001
	Integrative	0.075	0.115	0.037	0.655	0.514
	End Mot Int.	0.224	0.167	0.077	1.34	0.183
Shift Conversation	(Constant)	1.253	0.597		2.1	0.038
	BEST Plus (Baseline)	0.691	0.061	0.68	11.302	<.001
	Integrative	-0.144	0.07	-0.123	-2.057	0.042
	End Mot Int.	0.332	0.134	0.153	2.482	0.014

Table 229. Regression model to predict end of program self-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	0.763	0.281		2.713	0.008
	Baseline Proficiency	0.534	0.064	0.571	8.353	<.001
	Integrative	-0.009	0.04	-0.014	-0.229	0.819
	End Mot Int.	0.191	0.065	0.202	2.95	0.004
Shift Conversation	(Constant)	1.115	0.277		4.018	<.001
	Baseline Proficiency	0.436	0.063	0.447	6.948	<.001
	Integrative	-0.069	0.03	-0.15	-2.303	0.023
	End Mot Int.	0.265	0.056	0.313	4.767	<.001
Shift Writing	(Constant)	0.134	0.342		0.391	0.697
	Baseline Proficiency	0.647	0.08	0.623	8.12	<.001
	Integrative	0.042	0.039	0.074	1.056	0.294
	End Mot Int.	0.291	0.077	0.293	3.8	<.001

Table 230. Regression model to predict end of program supervisor-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.269	0.676		1.878	0.067
	Baseline Proficiency	0.593	0.173	0.501	3.438	0.001
	Integrative	-0.138	0.121	-0.147	-1.141	0.26
	End Mot Int.	0.21	0.161	0.186	1.306	0.198
Shift Conversation	(Constant)	2.328	0.873		2.667	0.037
	Baseline Proficiency	0.032	0.164	0.053	0.193	0.853
	Integrative	-0.328	0.11	-1.16	-2.975	0.025
	End Mot Int.	0.54	0.213	0.946	2.53	0.045
Shift Writing	(Constant)	3.453	2.767		1.248	0.338
	Baseline Proficiency	0.574	0.312	0.838	1.839	0.207
	Integrative	-0.034	0.203	-0.083	-0.167	0.883
	End Mot Int.	-0.186	0.581	-0.146	-0.321	0.779

Table 231. Regression model to predict end of program self-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-0.327	0.328		-0.996	0.321
	Baseline Frequency	0.549	0.052	0.597	10.504	<.001
	Integrative	0.075	0.046	0.085	1.624	0.107
	End Mot Int.	0.408	0.075	0.31	5.424	<.001
Shift Conversation	(Constant)	0.349	0.295		1.182	0.239
	Baseline Frequency	0.534	0.053	0.57	10.041	<.001
	Integrative	0.025	0.036	0.039	0.713	0.477
	End Mot Int.	0.357	0.068	0.299	5.293	<.001
Shift Writing	(Constant)	0.28	0.358		0.783	0.436
	Baseline Frequency	0.484	0.07	0.555	6.901	<.001
	Integrative	0.037	0.043	0.058	0.869	0.388
	End Mot Int.	0.409	0.091	0.361	4.505	<.001

Table 232. Regression model to predict end of program supervisor-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.347	0.701		1.921	0.061
	Baseline Frequency	0.39	0.159	0.365	2.444	0.019
	Integrative	-0.02	0.123	-0.022	-0.162	0.872
	End Mot Int.	0.249	0.163	0.227	1.527	0.134
Shift Conversation	(Constant)	0.804	1.327		0.606	0.567
	Baseline Frequency	0.312	0.272	0.433	1.149	0.294
	Integrative	-0.214	0.202	-0.509	-1.063	0.329
	End Mot Int.	0.625	0.368	0.736	1.699	0.14
Shift Writing	(Constant)	0.279	3.99		0.07	0.951
	Baseline Frequency	0.612	0.477	0.738	1.284	0.328
	Integrative	-0.044	0.353	-0.075	-0.125	0.912
	End Mot Int.	0.35	0.924	0.188	0.378	0.742

Table 233. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.181	0.305		0.593	0.554
	Baseline Can Do	0.545	0.05	0.61	10.929	<.001
	Integrative	-0.011	0.043	-0.013	-0.244	0.807
	End Mot Int.	0.396	0.069	0.323	5.747	<.001
Shift Conversation	(Constant)	1.114	0.256		4.343	<.001
	Baseline Can Do	0.285	0.048	0.356	5.99	<.001
	Integrative	-0.009	0.029	-0.017	-0.3	0.765
	End Mot Int.	0.446	0.056	0.479	7.956	<.001

Table 234. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.847	0.776		2.382	0.022
	Baseline Can Do	0.528	0.155	0.497	3.404	0.002
	Integrative	-0.083	0.137	-0.08	-0.606	0.548
	End Mot Int.	0.172	0.175	0.144	0.982	0.332
Shift Conversation	(Constant)	2.117	0.801		2.644	0.033
	Baseline Can Do	0.181	0.132	0.397	1.374	0.212
	Integrative	-0.322	0.11	-1.149	-2.931	0.022
	End Mot Int.	0.529	0.204	0.924	2.6	0.035

Table 235. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	0.85	0.609		1.395	0.167
	Baseline Can Write	0.332	0.083	0.36	3.978	<.001
	Integrative	0.013	0.067	0.017	0.189	0.85
	End Mot Int.	0.634	0.119	0.485	5.31	<.001

Table 236. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	6.879	2.948		2.333	0.145
	Baseline Can Write	0.603	0.233	1.15	2.588	0.122
	Integrative	-0.332	0.267	-0.562	-1.244	0.34
	End Mot Int.	-0.661	0.695	-0.355	-0.951	0.442

Table 237. Regression model to predict end of program supervisor-report measure of confidence (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	0.665	0.865		0.769	0.446
	Baseline Confidence	0.305	0.156	0.272	1.956	0.057
	Integrative	0.021	0.15	0.019	0.138	0.891
	End Mot Int.	0.426	0.183	0.325	2.333	0.024
Shift Conversation	(Constant)	0.845	1.524		0.555	0.599
	Baseline Confidence	0.342	0.311	0.456	1.098	0.314
	Integrative	-0.457	0.245	-0.954	-1.87	0.111
	End Mot Int.	0.763	0.436	0.788	1.748	0.131
Shift Writing	(Constant)	1.942	2.209		0.879	0.472
	Baseline Confidence	0.598	0.135	1.098	4.41	0.048
	Integrative	-0.222	0.187	-0.326	-1.188	0.357
	End Mot Int.	0.246	0.505	0.115	0.486	0.675

Table 238. Regression model to predict end of program score on standardized measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	3.637	1.191		3.054	0.003
	BEST Plus (Baseline)	0.726	0.05	0.793	14.38	<.001
	Instrumental	-0.597	0.218	-0.147	-2.737	0.007
	End Mot Int.	0.253	0.16	0.087	1.582	0.117
Shift Conversation	(Constant)	2.012	0.899		2.237	0.027
	BEST Plus (Baseline)	0.681	0.062	0.669	11.018	<.001
	Instrumental	-0.239	0.156	-0.09	-1.532	0.128
	End Mot Int.	0.302	0.132	0.138	2.282	0.024

Table 239. Regression model to predict end of program self-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.534	0.459		3.343	0.001
	Baseline Proficiency	0.506	0.064	0.541	7.849	<.001
	Instrumental	-0.176	0.085	-0.131	-2.077	0.04
	End Mot Int.	0.207	0.064	0.22	3.236	0.002
Shift Conversation	(Constant)	1.25	0.396		3.156	0.002
	Baseline Proficiency	0.437	0.062	0.453	7.013	<.001
	Instrumental	-0.06	0.064	-0.06	-0.935	0.351
	End Mot Int.	0.238	0.055	0.278	4.318	<.001
Shift Writing	(Constant)	0.603	0.462		1.305	0.196
	Baseline Proficiency	0.639	0.08	0.615	7.972	<.001
	Instrumental	-0.085	0.077	-0.077	-1.107	0.272
	End Mot Int.	0.31	0.077	0.313	4.048	<.001

Table 240. Regression model to predict end of program supervisor-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	0.921	1.19		0.774	0.443
	Baseline Proficiency	0.549	0.171	0.463	3.205	0.003
	Instrumental	0	0.224	0	-0.004	0.997
	End Mot Int.	0.2	0.163	0.177	1.226	0.227
Shift Conversation	(Constant)	5.218	1.372		3.803	0.009
	Baseline Proficiency	-0.159	0.208	-0.268	-0.767	0.472
	Instrumental	-0.317	0.192	-0.555	-1.651	0.15
	End Mot Int.	0.087	0.197	0.153	0.443	0.674
Shift Writing	(Constant)	4.126	3.507		1.176	0.36
	Baseline Proficiency	0.554	0.265	0.809	2.092	0.171
	Instrumental	-0.16	0.823	-0.086	-0.195	0.864
	End Mot Int.	-0.183	0.566	-0.143	-0.324	0.777

Table 241. Regression model to predict end of program self-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-0.19	0.556		-0.341	0.734
	Baseline Frequency	0.551	0.055	0.599	10.019	<.001
	Instrumental	0.022	0.104	0.011	0.207	0.837
	End Mot Int.	0.419	0.076	0.319	5.48	<.001
Shift Conversation	(Constant)	0.448	0.424		1.055	0.293
	Baseline Frequency	0.542	0.052	0.58	10.454	<.001
	Instrumental	-0.013	0.073	-0.009	-0.178	0.859
	End Mot Int.	0.362	0.067	0.303	5.443	<.001
Shift Writing	(Constant)	0.95	0.473		2.006	0.049
	Baseline Frequency	0.496	0.069	0.569	7.198	<.001
	Instrumental	-0.14	0.081	-0.111	-1.719	0.09
	End Mot Int.	0.418	0.089	0.37	4.682	<.001

Table 242. Regression model to predict end of program supervisor-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	3.472	1.166		2.979	0.005
	Baseline Frequency	0.333	0.152	0.312	2.192	0.034
	Instrumental	-0.475	0.219	-0.274	-2.166	0.036
	End Mot Int.	0.273	0.155	0.249	1.766	0.084
Shift Conversation	(Constant)	1.035	1.788		0.579	0.584
	Baseline Frequency	0.209	0.27	0.291	0.776	0.467
	Instrumental	0.107	0.275	0.126	0.389	0.711
	End Mot Int.	0.375	0.311	0.441	1.204	0.274
Shift Writing	(Constant)	2.568	5.702		0.45	0.697
	Baseline Frequency	0.624	0.384	0.753	1.625	0.246
	Instrumental	-0.682	1.359	-0.251	-0.502	0.666
	End Mot Int.	0.509	0.921	0.274	0.553	0.636

Table 243. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.279	0.506		0.551	0.582
	Baseline Can Do	0.541	0.052	0.606	10.489	<.001
	Instrumental	-0.029	0.095	-0.016	-0.308	0.758
	End Mot Int.	0.397	0.069	0.324	5.732	<.001
Shift Conversation	(Constant)	1.424	0.381		3.735	<.001
	Baseline Can Do	0.263	0.049	0.329	5.393	<.001
	Instrumental	-0.056	0.064	-0.051	-0.872	0.385
	End Mot Int.	0.439	0.057	0.468	7.651	<.001

Table 244. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	4.021	1.254		3.206	0.003
	Baseline Can Do	0.435	0.152	0.41	2.863	0.007
	Instrumental	-0.534	0.24	-0.283	-2.227	0.032
	End Mot Int.	0.212	0.166	0.178	1.276	0.209
Shift Conversation	(Constant)	5.017	1.093		4.589	0.003
	Baseline Can Do	0.005	0.138	0.011	0.035	0.973
	Instrumental	-0.351	0.164	-0.615	-2.149	0.069
	End Mot Int.	0.11	0.174	0.193	0.636	0.545

Table 245. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	1.329	0.81		1.64	0.105
	Baseline Can Write	0.325	0.084	0.353	3.892	<.001
	Instrumental	-0.103	0.127	-0.071	-0.805	0.423
	End Mot Int.	0.647	0.118	0.495	5.46	<.001

Table 246. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	12.815	3.46		3.704	0.066
	Baseline Can Write	0.51	0.148	0.973	3.456	0.075
	Instrumental	-1.666	0.808	-0.612	-2.061	0.175
	End Mot Int.	-0.42	0.553	-0.226	-0.76	0.527

Table 247. Regression model to predict end of program supervisor-report measure of confidence (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	2.905	1.426		2.037	0.048
	Baseline Confidence	0.303	0.149	0.27	2.03	0.049
	Instrumental	-0.482	0.268	-0.234	-1.798	0.079
	End Mot Int.	0.433	0.174	0.331	2.49	0.017
Shift Conversation	(Constant)	4.156	2.167		1.917	0.104
	Baseline Confidence	-0.006	0.315	-0.008	-0.019	0.985
	Instrumental	-0.405	0.34	-0.418	-1.189	0.279
	End Mot Int.	0.311	0.401	0.321	0.777	0.467
Shift Writing	(Constant)	6.144	2.566		2.394	0.139
	Baseline Confidence	0.559	0.096	1.026	5.795	0.029
	Instrumental	-1.099	0.635	-0.351	-1.731	0.226
	End Mot Int.	0.311	0.418	0.145	0.744	0.534

Table 248. Regression model to predict end of program score on standardized measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	1.419	1.196		1.187	0.238
	BEST Plus (Baseline)	0.715	0.051	0.797	14.063	<.001
	Group cohesion	-0.127	0.256	-0.028	-0.496	0.621
	End Mot Int.	0.278	0.166	0.099	1.679	0.096
Shift Conversation	(Constant)	1.223	1.407		0.869	0.386
	BEST Plus (Baseline)	0.729	0.066	0.682	10.961	<.001
	Group cohesion	-0.192	0.302	-0.041	-0.635	0.527
	End Mot Int.	0.401	0.151	0.175	2.66	0.009

Table 249. Regression model to predict end of program self-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	0.157	0.461		0.341	0.734
	Baseline Proficiency	0.534	0.064	0.561	8.321	<.001
	Group cohesion	0.123	0.099	0.08	1.243	0.216
	End Mot Int.	0.188	0.066	0.201	2.847	0.005
Shift Conversation	(Constant)	0.946	0.57		1.66	0.099
	Baseline Proficiency	0.437	0.063	0.46	6.947	<.001
	Group cohesion	-0.002	0.119	-0.001	-0.017	0.987
	End Mot Int.	0.251	0.06	0.288	4.153	<.001
Shift Writing	(Constant)	0.274	0.93		0.295	0.769
	Baseline Proficiency	0.643	0.083	0.62	7.789	<.001
	Group cohesion	-0.01	0.21	-0.004	-0.049	0.961
	End Mot Int.	0.308	0.089	0.311	3.446	0.001

Table 250. Regression model to predict end of program supervisor-report measure of proficiency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-1.437	1.35		-1.064	0.293
	Baseline Proficiency	0.589	0.155	0.503	3.805	<.001
	Group cohesion	0.543	0.296	0.223	1.837	0.073
	End Mot Int.	0.117	0.159	0.101	0.735	0.467
Shift Conversation	(Constant)	1.025	4.347		0.236	0.822
	Baseline Proficiency	-0.204	0.286	-0.343	-0.712	0.503
	Group cohesion	0.593	0.951	0.289	0.623	0.556
	End Mot Int.	0.107	0.231	0.188	0.463	0.66
Shift Writing	(Constant)	2.531	7.343		0.345	0.763
	Baseline Proficiency	0.556	0.27	0.812	2.061	0.175
	Group cohesion	0.217	1.342	0.063	0.162	0.886
	End Mot Int.	-0.236	0.49	-0.184	-0.482	0.678

Table 251. Regression model to predict end of program self-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	-0.58	0.545		-1.065	0.289
	Baseline Frequency	0.573	0.052	0.61	10.95	<.001
	Group cohesion	0.096	0.118	0.043	0.816	0.416
	End Mot Int.	0.412	0.079	0.305	5.226	<.001
Shift Conversation	(Constant)	0.665	0.641		1.037	0.301
	Baseline Frequency	0.547	0.055	0.579	9.968	<.001
	Group cohesion	-0.064	0.138	-0.027	-0.465	0.642
	End Mot Int.	0.367	0.075	0.3	4.903	<.001
Shift Writing	(Constant)	0.345	0.958		0.36	0.72
	Baseline Frequency	0.495	0.071	0.567	6.999	<.001
	Group cohesion	0.004	0.22	0.001	0.02	0.984
	End Mot Int.	0.41	0.101	0.364	4.041	<.001

Table 252. Regression model to predict end of program supervisor-report measure of frequency (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	1.323	1.41		0.938	0.353
	Baseline Frequency	0.382	0.151	0.367	2.538	0.015
	Group cohesion	-0.016	0.307	-0.007	-0.053	0.958
	End Mot Int.	0.258	0.163	0.24	1.587	0.12
Shift Conversation	(Constant)	-0.71	4.83		-0.147	0.888
	Baseline Frequency	0.159	0.267	0.221	0.596	0.573
	Group cohesion	0.473	0.981	0.155	0.482	0.647
	End Mot Int.	0.391	0.309	0.461	1.266	0.252
Shift Writing	(Constant)	-11.688	9.025		-1.295	0.325
	Baseline Frequency	0.75	0.306	0.904	2.449	0.134
	Group cohesion	2.438	1.734	0.489	1.406	0.295
	End Mot Int.	0.188	0.636	0.101	0.295	0.796

Table 253. Regression model to predict end of program score on self-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	-0.736	0.48		-1.533	0.127
	Baseline Can Do	0.58	0.049	0.638	11.826	<.001
	Group cohesion	0.211	0.102	0.106	2.056	0.042
	End Mot Int.	0.341	0.07	0.276	4.897	<.001
Shift Conversation	(Constant)	1.074	0.555		1.934	0.055
	Baseline Can Do	0.309	0.051	0.388	6.013	<.001
	Group cohesion	0.04	0.117	0.022	0.344	0.731
	End Mot Int.	0.377	0.064	0.401	5.929	<.001

Table 254. Regression model to predict end of program score on supervisor-report measure of ability to complete spoken workplace behaviors (Can Do) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	P
Shift Basics	(Constant)	2.507	1.719		1.459	0.152
	Baseline Can Do	0.55	0.16	0.499	3.45	0.001
	Group cohesion	-0.242	0.371	-0.086	-0.652	0.518
	End Mot Int.	0.191	0.185	0.155	1.035	0.307
Shift Conversation	(Constant)	8.242	3.199		2.576	0.037
	Baseline Can Do	0.044	0.154	0.097	0.288	0.782
	Group cohesion	-1.019	0.645	-0.502	-1.58	0.158
	End Mot Int.	0.128	0.192	0.223	0.666	0.527

Table 255. Regression model to predict end of program score on self-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	2.0	1.552		1.288	0.202
	Baseline Can Write	0.34	0.085	0.366	4.016	<.001
	Group cohesion	-0.285	0.348	-0.083	-0.818	0.416
	End Mot Int.	0.688	0.136	0.526	5.055	<.001

Table 256. Regression model to predict end of program score on supervisor-report measure of ability to complete written workplace behaviors (Can Write) (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Writing	(Constant)	0.048	10.735		0.004	0.997
	Baseline Can Write	0.489	0.238	0.933	2.056	0.176
	Group cohesion	1.492	2.084	0.299	0.716	0.548
	End Mot Int.	-0.946	0.807	-0.509	-1.172	0.362

Table 257. Regression model to predict end of program supervisor-report measure of confidence (Mediated by end of program Motivational Intensity)

EUA Course	Proficiency Measure	B	SE	β	t	p
Shift Basics	(Constant)	0.726	1.76		0.413	0.682
	Baseline Confidence	0.344	0.148	0.312	2.323	0.025
	Group cohesion	-0.036	0.379	-0.013	-0.094	0.925
	End Mot Int.	0.439	0.183	0.337	2.396	0.021
Shift Conversation	(Constant)	7.943	6.231		1.275	0.25
	Baseline Confidence	0.099	0.323	0.132	0.306	0.77
	Group cohesion	-1.178	1.256	-0.338	-0.938	0.385
	End Mot Int.	0.277	0.415	0.286	0.666	0.53
Shift Writing	(Constant)	1.076	9.493		0.113	0.92
	Baseline Confidence	0.521	0.168	0.957	3.105	0.09
	Group cohesion	0.342	1.769	0.06	0.193	0.864
	End Mot Int.	-0.06	0.561	-0.028	-0.107	0.925

REFERENCES

- Allen, E. & Seaman, C. (2007). Likert scales and data analyses. *Quality Progress*, 64-65.
- Archibold, R.C. & Thee-Brennan, M. (2010, May 3). Poll shows most in U.S. want overhaul of immigration laws. *The New York Times*. Retrieved December 17, 2011 from <http://www.nytimes.com>
- Arnold, J. (1999). *Affective Language Learning*. Cambridge: Cambridge University Press.
- Au, S. (1988). A critical appraisal of Gardner's social-psychological theory of second language (L2) learning. *Language Learning*, 38, 75-100.
- Bachman, J. (1964). Motivation in a task situation as a function of ability and control over task. *Journal of Abnormal and Social Psychology*, 69, 272-281.
- Bailey, K. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In H. Seliger & M. Long (Eds.), *Classroom-oriented research in Second Language Acquisition*. Rowley, MA: Newbury House.
- Bailey, R.A. (1983). Restricted randomization. *Biometrika*, 70, 183-198.
- Bandura, A., Ross, D. & Ross, S. A. (1961). Transmission of aggression through imitation of aggressive models. *Journal of Abnormal and Social Psychology*, 63, 575-582.
- Bardovi-Harlig, K. (2000). Tense and aspect in second language acquisition: Form, meaning and use. *Language Learning Monograph Series*. Malden, MA: Blackwell.
- Belmechri, F. & Hummel, K. (1998). Orientations and motivation in the acquisition of English as a Second Language among high school students in Quebec City. *Language Learning*, 48, 219-244.
- Benesch, S. (2001). *Critical English for academic purposes: Theory, politics and practice*. Mahwah, N.J.: Lawrence Erlbaum Associates.
- Berwick, R. & Ross, S. (1989). Motivation after matriculation: Are Japanese learners of English still alive after examination hell? *JALT*, 11, 193-210.

- Bialystok, E. & Hakuta, K. (1994). *In Other Words: The Science and Psychology of Second-Language Acquisition*. New York: Basic Books.
- Bialystok, E. & Hakuta, K. (1999). Confounded age: Linguistic and cognitive factors in age differences for second language acquisition. In D. Birdsong (Ed.), *Second Language and the Critical Period Hypothesis* (pp. 161-181). Mahwah, NJ: Lawrence Erlbaum.
- Birdsong, D. (1992). Ultimate attainment in second language acquisition. *Language*, 68, 706-755.
- Birdsong, D. (2006). Age and second language acquisition and processing: A selective overview. *Language Learning*, 56, 9-49.
- Bongaerts, T. (1999). Ultimate attainment in L2 pronunciation: The case of very advanced late L2 learners. In D. Birdsong (Ed.), *Second Language and the Critical Period Hypothesis* (pp. 133-159). Mahwah, NJ: Lawrence Erlbaum.
- Brown, J. D. (1988). *Understanding research in second language learning: A teacher's guide to statistics and research design*. London: Cambridge University Press.
- Buchanan, P. (2006). *State of Emergency: The Third World invasion and conquest of America*. New York, NY: Thomas Dunne Books.
- Buck, R. (1984). *The Communication of Emotion*. New York: Guilford Press.
- Cao, Y. & Philp, J. (2006). Interactional context and willingness to communicate: A comparison of behavior in whole class, group and dyadic interaction. *System*, 34, 480-493.
- Carafano, J.J. (2009, October 11). Reforming our immigration policies. *The Washington Times*. Retrieved December 17, 2011 from <http://www.washingtontimes.com>
- Carroll, J. B. (1958). A factor analysis of two foreign language aptitude batteries. *Journal of General Psychology*, 59, 3-19.
- Carroll, J. (1965). The prediction of success in foreign language training. In R. Glaser (Ed.), *Training, Research, and Education* (pp. 87-136). New York: Wiley.
- Carroll, J. (1981). Twenty-five years in foreign language aptitude. In K. Diller (Ed.), *Individual Differences and Universals in Language Learning Aptitude* (pp. 83-118). Rowley, MA: Newbury House.
- Carroll, J. & Sapon, S. (1959). *Modern Language Aptitude Test—Form A*. New York: The Psychological Corporation.
- Center for Applied Linguistics. (2005). *BEST Plus Technical Report*. Washington, DC: Author.

- Chastain, K. (1975). Affective and ability factors in second language acquisition. *Language Learning*, 25, 153-161.
- Cheng, Y., Horwitz, E. & Schallert, D. (1999). Language anxiety: Differentiating writing and speaking components. *Language Learning*, 49, 417-446.
- Chihara, T. & Oller, J. (1978). Attitudes and attained proficiency in EFL: A sociolinguistic study of adult Japanese speakers. *Language Learning*, 28, 55-68.
- Christians for Comprehensive Immigration Reform. (2012). *Statement of principles*. Retrieved December 17, 2011 from <http://faithandimmigration.org>
- Clement, R. (1986). Second language proficiency and acculturation: An investigation of the effects of language status and individual characteristics. *Journal of Language and Social Psychology*, 5, 271-290.
- Clement, R. (1988). *Scales of Attitude and Motivation Related to Inter-Ethnic Relations* [Technical Report]. Ottawa, ON: University of Ottawa.
- Clement, R., Baker, S.C., Josephson, G., & Noels, K.A. (2005). Media effects of ethnic identity among linguistic majorities and minorities. *Human Communication Research*, 31, 399-422.
- Clement, R., Dornyei, Z. & Noels, K. A. (1994). Motivation, self-confidence and group cohesion in the foreign language classroom. *Language Learning*, 44, 417-448.
- Clement, R. & Kruidenier, B. (1983). Orientations in second language acquisition: I. The effects of ethnicity, milieu and target language on their emergence. *Language Learning*, 33, 273-291.
- Clement, R. & Kruidenier, B. (1985). Aptitude, attitude and motivation in second language proficiency: A test of Clement's model. *Journal of Language and Social Psychology*, 4, 21-38.
- Clement, R., Smythe, P. & Gardner, R. (1978). Persistence in second language study: Motivational considerations. *Canadian Modern Language Review*, 34, 688-694.
- Cochrane, R. (1980). The acquisition of /r/ and /l/ by Japanese children and adults learning English as a second language. *Journal of Multilingual and Multicultural Development*, 1, 331-360.
- Crookes, G. & Schmidt, R. (1991). Language learning motivation: Reopening the research agenda. *Language Learning*, 41, 469-512.
- Deci, E. L. & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

- Deci, E. L. & Ryan, R. M. (2002). *Handbook of self-determination*. Rochester, NY: University of Rochester Press.
- DeKeyser, R. (2000). The robustness of critical period effects in second language acquisition. *Studies in Second Language Acquisition*, 22, 499-533.
- Dietrich, R. Klein, W. & Noyau, C. (1995). *The Acquisition of Temporality in a Second Language*. Amsterdam: John Benjamins.
- Dickinson, L. (1987). *Self-instruction in Language Learning*. Cambridge: Cambridge University Press.
- Dornyei, Z. (1990). Conceptualizing motivation in foreign-language learning. *Language Learning*, 40, 45-78.
- Dornyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge: Cambridge University Press.
- Dornyei, Z. (2003). *Questionnaires in Second Language Research: Construction, Administration and Processing*. Mahwah, N.J.: Lawrence Erlbaum.
- Dornyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, N.J.: Lawrence Erlbaum.
- Dornyei, Z. & Csizer, K. (1998). Ten commandments for motivating language learners: Results of an empirical study. *Language Teaching Research*, 2, 203-229.
- Dornyei, Z. & Csizer, K. (2002). Some dynamics of language attitudes and motivation: Results of a longitudinal nationwide survey. *Applied Linguistics*, 23, 421-462.
- Dornyei, Z. & Kormos, J. (2000). The role of individual and social variables in oral task performance. *Language Teaching Research*, 4, 275-300.
- Dornyei, Z. & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics* (Thames Valley University, London), 4, 43-69.
- Dornyei, Z. & Schmidt, R. (2001). *Motivation and Second Language Acquisition*. Honolulu: University of Hawai'i Press.
- Ehrman, M. (1996). *Understanding Second Language Difficulties*. Thousand Oaks, CA: Sage.
- Ehrman, M. & Oxford, R. (1995). Cognition plus: Correlates of language learning success. *The Modern Language Journal*, 79, 67-89.
- Elkhafaifi, H. (2005). Listening comprehension and anxiety in the Arabic language classroom. *The Modern Language Journal*, 89, 206-220.

- Ellis, R. (1989). Classroom learning styles and their effect on second language acquisition: A study of two learners. *System*, 17, 249-262.
- Ellis, R. (2008). *The Study of Second Language Acquisition* (2nd ed.). Oxford, UK: Oxford University Press.
- Ellis, R., Hacker, P. & Loewen, S. (2006). The relationship between an early start in language learning in New Zealand schools and students' motivation. *New Zealand Studies in Applied Linguistics*, 12, 16-34.
- Ellis, R. & Rathbone, M. (1987). *The Acquisition of German in a Classroom Context*. Mimeograph, London: Ealing College of Higher Education.
- Ely, C. (1986a). An analysis of discomfort, risktaking, sociability, and motivation in the L2 classroom. *Language Learning*, 36, 1-25.
- Ely, C. (1986b). Language learning motivation: A descriptive and causal analysis. *The Modern Language Journal*, 70, 28-35.
- Evans, C. R. & Dion, K. L. (1991). Group cohesion and performance: A meta-analysis. *Small Group Research*, 22, 175-186.
- Eysenck, M. (1979). Anxiety, learning and memory: A reconceptualisation. *Journal of Research in Personality*, 13, 363-385.
- Farmworker Justice. (2011, July 21). AgJobs: The Agricultural Job Opportunities, Benefits and Security Act. *Farmworker Justice*. Retrieved December 17, 2011, from <http://fwjustice.org>
- Federation for American Immigration Reform (FAIR). (2011). *Immigration Issues*. Retrieved December 17, 2011, from <http://www.fairus.org>
- Festinger, L. (1950). Informal social communication. *Psychological Review*, 57, 271-82.
- Flege, J. (1999). Age of learning and second language speech. In D. Birdsong (Ed.), *Second Language Acquisition and the Critical Period Hypothesis* (pp. 101-131). Mahwah, N.J.: Lawrence Erlbaum.
- Forsyth, D. (1990). *Group dynamics*. Needham Heights, MA: Allyn & Bacon.
- Gardner, R. (1980). On the validity of affective variables in second language acquisition: Conceptual, contextual, and statistical considerations. *Language Learning*, 30, 255-270.
- Gardner, R. (1983). Learning another language: A true social psychological experiment. *Journal of Language and Social Psychology*, 2, 219-240.

- Gardner, R. (1985). *Social Psychology and Second Language Learning: The Role of Attitude and Motivation*. London: Edward Arnold.
- Gardner, R. (1988). The socio-educational model of second language (L2) learning: Assumptions, findings and issues. *Language Learning*, 38, 101-126.
- Gardner, R. C. (2001). Integrative motivation and second language acquisition. In Z. Dornyei & R. Schmidt (Eds.), *Motivation and second language acquisition* (Technical Report #23, pp. 1-19). Honolulu: University of Hawai'i, Second Language Teaching and Curriculum Center.
- Gardner, R., Ginsberg, R., & Smythe, P. (1976). Attitudes and motivation in second language learning: Course related changes. *The Canadian Modern Language Review*, 32, 243-266.
- Gardner, R., Lalonde, R., & Moorcroft, R. (1985). The role of attitudes and motivation in 2nd language learning: Correlation and experimental considerations. *Language Learning*, 35, 207-227.
- Gardner, R. & Lambert, W. (1959). Motivational variables in second language acquisition. *Canadian Journal of Psychology*, 13, 266-272.
- Gardner, R. & Lambert, W. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Gardner, R. & MacIntyre, P. (1991). An instrumental motivation in language study: Who says it isn't effective? *Studies in Second Language Acquisition*, 13, 57-72.
- Gardner, R. & MacIntyre, P. (1992). A student's contributions to second language learning. Part I: Cognitive variables. *Language Teaching*, 25, 211-220.
- Gardner, R., Moorcroft, R. & MacIntyre, P. (1987). *The role of anxiety in second language performance of language dropouts*. Research Bulletin 657. London, Ontario: University of Western Ontario.
- Gardner, R., Tremblay, P. & Masgoret, A-M. (1997). Towards a full model of second language learning: An empirical investigation. *The Modern Language Journal*, 81, 344-362.
- Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Rowley, MA: Newbury House.
- Genesee, F. (2004). What do we know about bilingual education for majority language students? In T.K. Bhatia & W. Ritchie (Eds.), *Handbook of bilingualism and multiculturalism* (pp. 547-576). Malden, MA: Blackwell.
- Genesee, F., Rogers, P. & Holobow, N. (1983). The social psychology of second language learning: Another point of view. *Language Learning*, 33, 209-224.

- Glicksman, L, Gardner, R. & Smythe, P. (1982). The role of integrative motivation on students' participation in the French classroom. *Canadian Modern Language Review*, 38, 625-647.
- Goldberg, E. & Noels, K. A. (2006). Motivation, ethnic identity and post-secondary education choices of graduates of intensive French language high school programs. *Canadian Modern Language Review*, 62, 423-447.
- Gregersen, T. & Horwitz, E. (2002). Language learning and perfectionism: Anxious and non-anxious language learners' reactions to their own oral performance. *The Modern Language Journal*, 86, 562-570.
- Grigorenko, E., Sternberg, R. & Ehrman, M. (2000). A theory-based approach to the measurement of foreign language learning ability: The Canal-F theory and test. *The Modern Language Journal*, 84, 390-405.
- Guilloteaux, M. J. & Dornyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, 42, 55-77.
- Gully, S. M., Devine, D. J., Whitney, D. J. (1995). A meta-analysis of cohesion and performance. *Small Group Research*, 26, 497-525.
- Hakimzadeh, S. & Cohn, D. (2007, November 29). English usage among Hispanics in the United States. *Pew Hispanic Center*. Retrieved December 17, 2011 from www.pewhispanic.org
- Han, Z. (2004). *Fossilization in Adult Second Language Acquisition*. Clevedon, UK: Multilingual Matters.
- Harley, B. (1986). *Age in Second Language Acquisition*. Clevedon, UK: Multilingual Matters.
- Harley, B. & Hart, D. (1997). Language aptitude and second language proficiency in classroom learners of different starting ages. *Studies in Second Language Acquisition*, 19, 379-400.
- Harwood, J. Giles, H. & Bourhis, R. Y. (1994). The Genesis of Vitality theory: Historical patterns and discursal dimensions. *International Journal of the Sociology of Language*, 108, 167-206.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: Wiley.
- Heritage Foundation. (2011). *Protect America*. Retrieved December 17, 2011 from <http://www.heritage.org>
- Hermann, G. (1980). Attitudes and success in children's learning of English as a second language: The motivational vs. the resultative hypothesis. *ELT Journal*, 34, 247-254.

- Hoefer, M., Rytina, N. & Baker, B.C. (2010). Estimates of the unauthorized immigrant population residing in the United States: January 2009. *Population Estimates*. United States Department of Homeland Security: Office of Immigration Statistics.
- Holec, H. (1980). Learner training: Meeting needs in self-directed learning. In H. Altman & C. V. James (Eds.), *Foreign Language Teaching: Meeting Individual Needs*. Oxford: Pergamon.
- Horwitz, E. (1986). Preliminary evidence for the reliability and validity of a foreign language anxiety scale. *TESOL Quarterly*, 20, 559-562.
- Horwitz, E. (1987). Linguistic and communicative competence: Reassessing foreign language aptitude. In B. Van Patten, T. Dvorak, & J. Lee (Eds.), *Foreign Language Learning: A Research Perspective* (pp. 146-157). New York: Newbury House.
- Horwitz, E. (2000). It ain't over till it's over: On foreign language anxiety, first language deficits, and the confounding of variables. *The Modern Language Journal*, 84, 256-259.
- Horwitz, E. (2001). Language anxiety and achievement. *Annual Review of Applied Linguistics*, 21, 112-126.
- Horwitz, E., Horwitz, M., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70, 125-132.
- Horwitz, E. & Young, D. (1991). *Language Learning Anxiety: From Theory and Research to Classroom Implications*. Englewood Cliffs, N.J.: Prentice Hall.
- Ioup, G., Boustagui, E., El Tigi, M., & Moselle, M. (1994). Reexamining the critical period hypothesis: The influence of maturation state on the acquisition of English as a second language. *Studies in Second Language Acquisition*, 16, 73-98.
- Johnson, J. S., & Newport, E. L. (1989). Critical period effects in second language learning: The influence of maturational state on the acquisition of English as a second language. *Cognitive Psychology*, 21, 60-99.
- Kang, S. (2005). Dynamic emergence of situational willingness to communicate in a second language. *System*, 33, 277-292.
- Karau, S. J. & Williams, K. D. (1997). The effects of group cohesiveness on social loafing and social compensation. *Group Dynamics: Theory Research and Practice*, 1, 156-168.
- Keller, J. (1983). Motivational design of instruction. In C. Reigeluth (Ed.), *Instructional Design Theories and Models*. Hillsdale, N.J.: Lawrence Erlbaum.
- Kerwin, D. M. (2010). More than IRCA: US legalization programs and the current policy debate. Downloaded from: <http://www.migrationpolicy.org/pubs/legalization-historical.pdf>.

- Kiss, C. & Nikolov, M. (2005). Developing, piloting, and validating an instrument to measure young learners' aptitude. *Language Learning*, 55, 99-150.
- Kleinmann, H. (1978). The strategy of avoidance in adult second language acquisition. In W. Ritchie (Ed.), *Second Language Acquisition Research* (pp. 157-174). New York: Academic Press.
- Krashen, S., Long, M. & Sarcella, R. (1979). Age, rate and eventual attainment in second language acquisition. *TESOL Quarterly*, 13, 573-582.
- Kruger, J. & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, 77, 1121-1134.
- Kruidenier, B. & Clement, R. (1986). *The Effect of Context on the Composition and Role of Orientations in Second Language Acquisition*. Quebec: International Centre for Research on Bilingualism.
- Lalonde, R. & Gardner, R. (1985). On the predictive validity of the Attitude/Motivation Test Battery. *Journal of Multilingual and Multicultural Development*, 6, 403-412.
- Lamb, M. (2004). Integrative motivation in a globalizing world. *System*, 32, 3-19.
- Lambert, W.E., Gardner, R.C., Barik, H.C., & Tunstall, K. (1963). Attitudinal and cognitive aspects of intensive study of a second language. *Journal of Abnormal and Social Psychology*, 66, 358-368.
- Leets, L. & Giles, H. (1995). Dimensions of minority language survival/non-survival: Intergroup cognitions and communication climates. In W. Fase, K. Jaspaert & S. Kroon (Eds.), *The state of minority languages* (pp. 37-71). Lisse, The Netherlands: Swets & Zeitlinger.
- Lehman, T.E. (1995). Coming to America: The benefits of open immigration. *The Freeman*, 45. Retrieved December 17, 2011 from <http://www.thefreemanonline.org/featured/coming-to-america-the-benefits-of-open-immigration/>
- Lewis, K.R. (2004, January 21). Do immigrants really take jobs that Americans won't do? *Newhouse News Service*. Retrieved December 17, 2011 from <http://www.baylor.edu/pr/index.php?id=18397>
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 140, 1-55.
- Llorente, E. & Cruz, W. (2011, June 22). Robert Menendez, Senate Democrats re-introduce immigration reform bill. *Fox News Latino*. Retrieved December 17, 2011 from <http://latino.foxnews.com>

- Long, M. (1990). Maturational constraints on language development. *Studies in Second Language Acquisition*, 12, 251-286.
- Long, M. (2003). Stabilization and fossilization in interlanguage development. In C. Doughty & M. Long (Eds.), *Handbook of Second Language Acquisition* (pp. 487-535). Malden, MA: Blackwell.
- Lukmani, Y. (1972). Motivation to learn and language proficiency. *Language Learning*, 22, 261-273.
- MacIntyre, P. (2002). Motivation, anxiety and emotion in second language acquisition. In P. Robinson (Ed.), *Individual Differences in Second Language Acquisition* (pp. 45-68). Amsterdam: John Benjamins.
- MacIntyre, P., Baker, S., Clement, R. & Conrad, S. (2001). Willingness to communicate, social support and language learning orientations of immersion students. *Studies in Second Language Acquisition*, 23, 369-388.
- Macintyre, P. D., & Charos, C. (1996). Personality, attitudes, and affect as predictors of second language communication. *Journal of Language and Social Psychology*, 15, 3-26.
- MacIntyre, P., Clement, R., Dornyei, Z. & Noels, K. (1998). Conceptualizing willingness to communicate in a L2: A situated model of confidence and affiliation. *The Modern Language Journal*, 82, 545-562.
- MacIntyre, P. & Gardner, R. (1991a). Methods and results in the study of foreign language anxiety: A review of the literature. *Language Learning*, 41, 25-57.
- MacIntyre, P. & Gardner, R. (1991b). Language anxiety: Its relationship to other anxieties and to processing in native and second languages. *Language Learning*, 41, 513-534.
- MacIntyre, P. & Gardner, R. (1994). The subtle effects of induced anxiety on cognitive processing in the second language. *Language Learning*, 44, 283-305.
- Malkin, M. (2002). *Invasion: How America still welcomes terrorists, criminal and other foreign menaces in our shores*. Washington, DC: Regnery Publishing.
- Manolopoulo-Sergi, E. (2004). Motivation within the information processing model of foreign language learning. *System*, 32, 427-442.
- Masgoret, A. & Gardner, R. (2003). Attitudes, motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning*, 53, 123-163.
- Massey, D. S. (2005). Backfire at the border: Why enforcement without legalization cannot stop illegal immigration. Trade Policy Analysis. CATO Institute. No. 29.

- Matsumoto, K. (1987). Factors involved in the L2 learning process, *JALT Journal*, 11, 167-192.
- McCroskey, J. C., & Richmond, V. P. (1991). Willingness to Communicate: A cognitive view. In M. Booth-Butterfield (Ed.), *Communication, cognition, and anxiety*. (pp. 19-37). Newbury Park, CA: Sage.
- "Mexican Police Find 513 US-Bound Migrants in Two Trucks" (2011). Associated Press. Retrieved May 18, 2011 from <http://www.foxnews.com/world/2011/05/18/mexican-police-find-513-bound-migrants-trucks/>
- Miller, D.T., & Ross, M. (1975). Self-serving biases in the attribution of causality: Fact or fiction? *Psychological Bulletin*, 82, 213-225.
- Mowrer, O. H. (1950). *Learning Theory and Personality Dynamics: Selected Papers*. New York: Ronald Press.
- Muchnick, A. & Wolfe, D. (1982). Attitudes and motivations of American students of Spanish. *Canadian Modern Language Review*, 38, 262-281.
- Mullen, B. & Copper, C. (1994). The relation between group cohesiveness and performance: An integration. *Psychological Bulletin*, 115, 210-227.
- Muñoz, C. (2006). The effects of age on foreign language learning: The BAF project. In C. Muñoz (Ed.), *Age and the Rate of Foreign Language Learning*. Clevedon, UK: Multilingual Matters.
- Nazario, S. (2006). *Enrique's Journey*. New York, NY: Random House.
- Noels, K. A. (2001). Learning Spanish as a second language: Learners' orientations and perceptions of their teachers' communication style. *Language Learning*, 51, 107-144.
- Noels, K. A., Clement, R. & Pelletier, L. G. (1999). Perceptions of teacher communicative style and students' intrinsic and extrinsic motivation. *Modern Language Journal*, 83, 23-34.
- Noels, K. A., Clement, R. & Pelletier, L. G. (2001). Intrinsic, extrinsic and integrative orientations of French Canadian learners of English. *The Canadian Modern Language Review*, 57, 424-442.
- Noels, K. A., Pelletier, L., Clement, R. & Vallerand, R. (2000). Why are you learning a second language? Motivational orientations and Self-Determination Theory. *Language Learning*, 50, 57-85.
- Oller, J., Baca, L., & Vigil, A. (1977). Attitudes and attained proficiency in ESL: A sociolinguistic study of Mexican Americans in the Southwest. *TESOL Quarterly*, 11, 173-183.
- Oller, J. & Perkins, K. (1978). Intelligence and language proficiency as sources of variance in self-reported affective variables. *Language Learning*, 28, 85-97.

- Olsen, L. & Samuels, S. (1973). The relationship between age and accuracy of foreign language pronunciation. *Journal of Educational Research*, 66, 263-267.
- Oxford, R. (1992). Who are our students? A synthesis of foreign and second language research on individual differences with implications for instructional practice. *TESL Canada Journal*, 9, 30-49.
- Oyama, S. (1976). A sensitive period in the acquisition of a non-native phonological system. *Journal of Psycholinguistic Research*, 5, 261-285.
- Parkinson, B. & Howell-Richardson, C. (1990). Learner diaries. In C. Brumfit & R. Mitchell (Eds.), *Research in the Language Classroom. ELT Documents 133* (pp. 128-140). Modern English Publications.
- Parry, T. & Child, J. (1990). Preliminary investigation of the relationship between VORD, MLAT, and language proficiency. In T. Parry & C. Stansfield (Eds.), *Language Aptitude Reconsidered* (pp. 30-66). Englewood Cliffs, N.J.: Prentice Hall.
- Passel, J.S. (2006). The size and characteristics of the unauthorized migrant population in the United States: Estimates based on the March 2005 current population survey. Downloaded from: <http://pewhispanic.org/files/reports/61.pdf>
- Patkowski, M. (1980). The sensitive period for the acquisition of syntax in a second language. *Language Learning*, 30, 449-472.
- Penfield, W., & Roberts, L. (1959). *Speech and brain mechanisms*. Princeton, NJ: Princeton University Press.
- Pew Hispanic Center (2012, April 23). Net migration from Mexico falls to zero—and perhaps less. Retrieved April 23, 2012 from <http://pewresearch.org/pubs/2250/mexican-immigration-immigrants-illegal-border-enforcement-deportations-migration-flows>
- Pew Research Center. (2011, May 4). Beyond Red vs. Blue. Retrieved December 18, 2011 from <https://www.people-press.org>
- Pimsleur, P. (1966). *Pimsleur Language Aptitude Battery (PLAB)*. New York: Harcourt Brace Jovanovich.
- Powell, B. (2011, May 11). Rep. Lamar Smith pre-empts Obama immigration address with DREAM Act attack. *Political Correction*. Retrieved December 17, 2011 from: <http://politicalcorrection.org/print/blog/201105100008>
- Ramage, K. (1990). Motivational factors and persistence in foreign language study. *Language Learning*, 40, 189-219.

- Rosenblum, M. R. (2010). Immigrant legalization in the United States and European Union: Policy goals and program design. Downloaded from: <http://www.migrationpolicy.org/pubs/legalization-policydesign.pdf>
- Rosenblum M.R., Capps. R. & Lin, S. Y-Y. (2011). Earned legalization: Effects of proposed requirements on undocumented men, women and children. Downloaded from: <http://www.migrationpolicy.org/pubs/legalization-requirements.pdf>
- Ryan, R. M. & Connell, J. P. (1989). Perceived locus of causality and internalization: Examining reasons for acting in two domains. *Journal of Personality and Social Psychology*, 57, 749-761.
- Sawyer, M. (1992). Language aptitude and language experience: Are they related? *The Language Programs of the International University of Japan Working Papers*, 3, 27-45.
- Sawyer, M. & Ranta, L. (2001). Aptitude, individual differences, and instructional design. In P. Robinson (Ed.), *Cognition and Second Language Instruction* (pp. 319-353). Cambridge: Cambridge University Press.
- Schmidt, R., Boraie, D. & Kassabgy, O. (1996). Foreign language motivation: Internal structure and external connections. In R. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 9-70). Honolulu, HI: University of Hawai'i, National Foreign Language Resource Center.
- Scovel, T. (1981). The recognition of foreign accents in English and its implications for psycholinguistic theories of language acquisition. In G. Savord & L. Laforge (Eds.), *Proceedings of the Fifth Conference of AILA* (pp. 389-401). Laval: University of Laval Press.
- Scovel, T. (2001). *Learning New Languages: A Guide to Second Language Acquisition*. Boston: Heinle and Heinle.
- Selinker, L. (1972). Interlanguage. *International Review of Applied Linguistics*, 10, 209-231.
- Selinker, L. & Lamendella, J. (1978). Two perspectives on fossilization in interlanguage learning. *Interlanguage Studies Bulletin*, 3, 143-191.
- Shepperd, J. A. (1993). Productivity loss in performance groups: A motivation analysis. *Psychological Bulletin*, 113, 67-81.
- Silverleib, A. (2011). Obama calls immigration reform critical, blasts GOP opponents. CNN.com, downloaded on May 10, 2011 from <http://www.cnn.com/2011/POLITICS/05/10/obama.immigration/index.html?hpt=T1>.
- Singleton, D. (1989). *Language Acquisition: The Age Factor*. Clevedon, UK: Multilingual Matters.

- Singleton, D. (2005). The critical period hypothesis: A coat of many colors. *International Review of Applied Linguistics*, 10, 209-231.
- Skehan, P. (1986a). Cluster analysis and the identification of learner types. In V. Cook (Ed.), *Experimental Approaches to Second Language Acquisition* (pp. 47-75). Oxford: Pergamon.
- Skehan, P. (1986b). Where does language aptitude come from? In P. Meara (Ed.), *Spoken Language*. London: Centre for Information on Language Teaching.
- Skehan, P. (1989). *Individual Differences in Second Language Learning*. London: Edward Arnold.
- Skehan, P. (1990). The relationship between native and foreign language learning ability: Educational and linguistic factors. In H. Dechert (Ed.), *Current Trends in European Second Language Acquisition Research* (pp. 83-106). Clevedon, UK: Multilingual Matters.
- Skinner, B.F. (1953). *Science and human behavior*. New York: Macmillan.
- Slevin, P. (2010). Deportation of illegal immigrants increases under Obama administration. Downloaded from: <http://www.washingtonpost.com/wp-dyn/content/article/2010/07/25/AR2010072501790.html>
- Snow, C. & Hoefnagel-Hohle, M. (1978). The critical age for language acquisition: Evidence from second language learning. *Child Development*, 49, 1114-1128.
- Sparks, R., Ganschow, L., & Javorsky, J. (2000). Déjà vu all over again: A response to Saito, Horwitz and Garza. *The Modern Language Journal*, 84, 251-259.
- Spielberger, C. (1983). *Manual for the State-Trait Anxiety Inventory (Form Y)*. Palo Alto, CA: Consulting Psychologists Press.
- Spielman, G. & Radnofsky, M. (2001). Learning language under tension: New directions from a qualitative study. *The Modern Language Journal*, 85, 259-278.
- Spolsky, B. (1989). *Conditions for Second Language Learning*. Oxford: Oxford University Press.
- Sticht, T. G., Armstrong, W. B., Hickey, D. T., & Caylor, J. S. (1987). *Cast-off youth: Policy and Training methods from the military experience*. Santa Barbara, CA: Praeger Publishing.
- Strong, M. (1983). Social styles and second language acquisition of Spanish-speaking kindergarteners. *TESOL Quarterly*, 17, 241-258.
- Strong, M. (1984). Integrative motivation: Cause or result of successful second language acquisition? *Language Learning*, 34, 1-14.

- Tachibana, Y., Matsukawa, R. & Zhong, Q.X. (1996). Attitudes and motivation for learning English: A cross-national comparison of Japanese and Chinese high school students. *Psychological Reports*, 79, 691-700.
- Tremblay, P. & Gardner, R. (1995). Expanding the motivation construct in language learning. *The Modern Language Journal*, 79, 505-520.
- Turnbull, M., Lapkin, S., & Hart, D. (2001). Grade 3 immersion students' performance in literacy and mathematics: Province-wide results from Ontario (1998-99). *The Canadian Modern Language Review*, 58, 9-26.
- United States Department of Homeland Security (2011). Budget-in-Brief: Fiscal Year 2011. Retrieved December 18, 2010 from: http://www.dhs.gov/xlibrary/assets/budget_bib_fy2011.pdf
- United States House of Representatives (2010, December). *H.R. 6497*. Retrieved December 18, 2010 from <http://www.gpo.gov/fdsys/pkg/BILLS-111hr6497ih/pdf/BILLS-111hr6497ih.pdf>
- Ushioda, E. (2003). Motivation as a socially mediated process. In D. Little, J. Ridley & E. Ushioda (Eds.), *Learner Autonomy in the Foreign Language Classroom: Teacher, Learner, Curriculum, Assessment* (pp. 90-102). Dublin: Authentik.
- Varan, D. (1998). The cultural erosion metaphor and the transcultural impact of media. *Journal of Communication*, 48, 58-85.
- Williams, M. & Burden, R. (1997). *Psychology for Language Teachers*. Cambridge: Cambridge University Press.
- Wittenborn, T. R. & Larsen, R. P. (1944). A factorial study of achievement in college German. *Journal of Educational Psychology*, 35, 39-45.
- Woodrow, L. (2006). Anxiety and speaking English as a second language. *RELJ Journal*, 37, 308-328.
- Yerkes, R.M. & Dodson, J.D. (1908). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology and Psychology*, 18, 459-482.
- Young, D. (1986). The relationship between anxiety and foreign language oral proficiency ratings. *Foreign Language Annals*, 19, 439-445.
- Zajonc, R. B. (1965). Social facilitation. *Science*, 149, 269-274.

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